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UNIVERSITY COLLEGE HOSPITAL.

ON THE

ENDERMIC METHOD

OF

APPLYING THE SALTS OF MORPHIA;

WITH CASES AND REMARKS,

By Dr. A. T. THOMSON.

Cases in which the salts of morphia were used endermically.—Local and general effects of the treatment.—The mode in which the remedies acted.—Best plan of denuding the surface.—Advantages attending the introduction of medicines by the skin.

Mary Ann Marshall, aged 19 years, was admitted on the 25th of November, 1837. She had been in the hospital seven months before this time, but had enjoyed good health in the interval. She was attacked with aching and throbbing pain of the fingers of the right hand, extending up the arm, and soon lost all power of volition over the extremity, which now swelled, whilst the pain continued to increase steadily in severity until her admission into the hospital. The tenderness of the arm was so great that she was unable to bear the slightest touch. The tongue was clean, the pulse natural, the bowels were open, and the catamenia regular. For some days various means of relief were attempted, under the idea that the disease was hysteria, but without any advantage being derived. On the 1st of December a moderate-sized blister was applied upon the inside of the wrist, and one grain of *hydrochlorate of morphia*, combined with six grains of *refined sugar*, in fine powder, was ordered to be sprinkled, night and morning, upon the blistered surface.

Dec. 3. The pain was much abated; and the susceptibility of the skin of the arm lessened.

8. The pain was completely gone, but the face and the upper part of the neck, and the shoulders, were covered with a small pustular eruption. The inflammation of the face was considerable, and the eyelids œdematous, obstructing the sight. The tongue was furred; the pulse hard, and 120; the skin hot, and the thirst great. The use of the salt of morphia was discontinued; and a mixture consisting of 12 grains of *disulphate of quina*, half an ounce of *sulphate of magnesia*, one drachm of *diluted sulphuric acid*, and eight ounces of *infusion of cinchona*, ordered to be taken, in doses of two tablespoonsful, every third hour.

10. The swelling of the face was reduced, and the crusts of many of the pustules were falling off; but the eruption was extending down the back.

15. The eruption had extended to the thighs, but it was now evidently on the decline: there was no return of the affection of the hand and the arm.

31. She had remained perfectly free from pain since the 8th; the eruption had wholly disappeared. She was discharged cured.

Case 2.—Jane Lawrence, aged 26, a cook, a single woman, was admitted into the hospital on the 30th of December, 1838. She had been in the hospital three years ago, with acute rheumatism, but since that time she had remained in tolerable health, until three weeks since, when she found that on pressing the cicatrix of a wound, on the fore part of the left hand, which had been inflicted by the breaking of an earthen vessel, a peculiar suffocating sensation was experienced in the gullet, and a crowing sound elicited. These symptoms were augmented by taking food, and on the least exertion. Her appetite was nearly gone; the tongue was thickly furred; the pulse full, strong, hard, and 108; the skin hot and dry, but the bowels were open. She was ordered to be cupped between the scapulæ; to take immediately afterwards a pill containing six grains of *calomel*, and to follow it up with a brisk *black dose*. After the bowels were freely opened, she was directed to take a pill containing half a grain of *nitrate of silver*, and two grains of *extract of conium*, every sixth hour; with one drachm of *valerian* in powder.

Jan. 6. No improvement of the symptoms was obtained, although the nitrate of silver had been increased to two grains; but the

tongue was cleaner. The pressure on the finger excited much pain, and the spasmodic affection of the gullet and the glottis was increased. A blister was ordered to be applied on the wrist, and a grain and a half of *hydrochlorate of morphia*, with six grains of *refined sugar*, to be sprinkled on the denuded surface, night and morning, daily. The internal medicines were ordered to be continued.

13. Squeezing the finger no longer caused the spasmodic action; the tongue was clean, the pulse reduced to 84, and the temperature of the skin was natural.

22. There had been no return of the spasmodic action, except for two days, after lifting a heavy weight, when it was found that the pain and spasm were induced by pressure on the upper part of the spine, as well as on the finger. The blister on the wrist was directed to be healed, and another opened over that part of the spine where pressure induced the spasm. The blistered surface was ordered to be sprinkled, night and morning, with a grain and a half of *acetate of morphia*, and seven grains of *sugar*. She complained of great weakness, for the relief of which she took a moderate dose of sulphate of iron, in combination with extract of gentian.

30. The spasmodic affection was gone; but pressure on the dorsal spine, and strong pressure in the course of the median nerve caused a peculiar expression of anxiety on the countenance, although neither the sensation of suffocation nor the crowing noise were produced. The pustular eruption had appeared on the back and shoulders. The use of the acetate of morphia was ordered to be discontinued.

Feb. 2. She was discharged cured.

Case 3.—Mary Thomas, aged 17, was admitted July 25, 1838. She complained of pain in the ankle, accompanied with a sensation of heat and soreness, resembling, to use her own language, the action of a blister. It was increased on standing; and the foot was turned inwards, owing to the pain. The general health was apparently good. She was ordered to apply a blister on the pained part; and to sprinkle the denuded surface with two grains of *hydrochlorate of morphia*, mixed with six grains of *refined sugar*, night and morning.

July 24. The pain was much relieved, but not gone.

August 5. The pain was considerably relieved.

7. The pain was gone, and the foot returned to its natural position; an eruption appeared this morning, and extended over the face, shoulders, and chest.

13. The eruption has disappeared, and the pain has not returned.

17. She was discharged cured.

These three cases (said Dr. Thomson, in his lecture) showed the effects of the endermic employment of the salts of morphia in local painful disease. The next two cases would illustrate their general influence.

Case 4.—Hannah Barber, aged 40, was transmitted from Mr. Liston's care to that of Dr. Thomson. She had been under the management of Mr. Liston for ulceration of the larynx, and had been treated with the local application of the nitrate of silver and blisters. She complained of cough, which caused muco-purulent expectoration, and likewise of night sweats. The pulse was small and quick; the tongue moist and clean; the bowels open; and the catamenia, until the last period, when she passed over a fortnight, were regular. On examining the chest percussion was extensively dull on the left side; the respiration was sonorous, with mucous and sub-mucous râles, and bronchophony. The impulse of the heart was sensible over a great extent of the chest. She was bled to twelve ounces, purged, and a mixture, with the compound powder of ipecacuanha, ordered to be taken once in four hours. A blister was applied between the scapulæ, and sprinkled with a grain and a half of *acetate of morphia*, night and morning, daily.

Dec. 22. She was much relieved, until last night, when, the blister having dried up, the dyspnœa returned, and the night sweat was very copious. The blister was again opened, and the salt of morphia used as before. The internal medicine was discontinued. The improvement was progressive until the 9th of February, when she caught cold, and the cough returned. It was discovered that she had discontinued the use of the salt of morphia since the 8th instant, as she complained that it caused headach and vertigo. Its employment was resumed, and she was ordered to take an emetic once a week.

23. She had been better in every respect, but she complained of sore throat and pain in the act of deglutition. The right tonsil was enlarged and slightly inflamed; the cough had also returned. The emetics were ordered to be discontinued, and the use of the morphia to be resumed. The improvement soon again became obvious.

Jan. 14. The cough and dyspnœa were completely gone; she had no night sweats. The pustular eruption had appeared on the trunk of the body generally, and was rapidly extending upwards and downwards.

16. Feels better than she has felt for years.

20. She was discharged cured.

Case 5.—Charlotte Lott, aged 36, was admitted June 26, 1838, a single woman, a servant. About nine weeks ago she was seized with a violent pain of the right side, which felt, also, very tender on pressure,—

symptoms which she ascribed to cold. She was bled twice, and blistered, by the medical attendant of the family, but without any decided benefit. A fortnight afterwards, a cough supervened, which greatly augmented the pain in the side; it has gradually become worse; it now recurs in frequent and violent paroxysms, attended with severe dyspnœa on lying on either side. She has tenderness on the right side of the chest, with dullness on percussion. The expectoration is muco-purulent, and the night sweats are copious; the pulse is small, and compressible; the bowels are regular, and the appetite is good. The catamenia have ceased since the commencement of the attack.

27. A blister was applied on the pained side, and the denuded surface sprinkled with a grain and a half of *hydrochlorate of morphia*, and six grains of *refined sugar*, night and morning.

July 4. The sputa were diminished in quantity, and the cough was much less.

13. The cough and perspiration were much abated, the sputa less purulent.

27. Still improving. Let her take an emetic once a week.

Aug. 7. The cough is not worse, but it is still severe. Another blister was applied to the side, and the same quantity of hydrochlorate of morphia used.

10. She was greatly better in every respect. She was not well. She was discharged, at her own request, as she wished to try the effect of country air.

In lecturing on these cases, Dr. Thomson said that the pupils had had many opportunities of observing the plan which he had pursued in these cases,—and which he had also extensively employed in private practice. He was anxious to offer a few remarks upon the subject, and to explain the manner in which he conceived narcotics operated, when they were thus administered. If we reflect (said he) how long a period has elapsed since medicinal agents had been applied to, or rubbed upon, the entire skin, and how much benefit had been derived from counter-irritants, it was remarkable that no advantage had been taken of the skin, as an inlet to medicinal substances capable of acting generally upon the system, until the year 1823. MM. Lembert and Lessieur, at that time, suggested what was termed the *endermic method*. They had some followers among continental practitioners, but few in this country had ventured to administer medicines in this way; and it was not too broad an assertion to affirm that it had been most unjustifiably neglected. Since he, Dr. T., had had the honour of being one of the physicians of the University College Hospital, he had lost no opportunity of essaying the value of the endermic method, and he had seen such advantages derived from it, that he was most anxious to recommend it to the members of the profession, as well as to the pupils of the hospital.

He was fully aware that, in clinical instruction, hypotheses should be avoided; but, at the same time, the explanation of the manner in which remedial agents influenced the habit, if founded upon correct physiological principles, could not fail to be acceptable. His theory of the *modus operandi* of narcotics, when applied to the skin, previously deprived of its epidermis, was based upon that foundation; he did not claim for it more than its legitimate value. But, before explaining his opinions, he would mention a few circumstances relative to the best method of denuding the surface, and preparing the skin to aid the influence of the narcotics which might be applied to it.

The most common method of raising the cuticle was the application of a blister; and since the introduction of the acetum cantharidis, we possessed a very rapid and efficient means of blistering. This might be also rapidly effected by means of a compound of four parts of lard rubbed up with six of *strong* liquid ammonia. The best mode of removing the cuticle was to apply over the blister an emollient poultice; the whole of the raised cuticle was, by this means, taken off, without that suffering, to nervous and irritable patients, which the ordinary method induced. The salts of morphia, when these were the narcotics employed, tended, in some degree, to promote the suppurative process on the denuded surface, and, consequently, to prevent it from cicatrizing. Opium, henbane, and belladonna, operated in the same manner; but he had found that the influence of all of them, in that respect, was greatly augmented by the addition of a small quantity of refined sugar. It was not necessary to apply a large blister; on the contrary, as the quantity of a narcotic to be applied was small, the denuded surface needed not to be greater than it could cover.

The full dose of the narcotic should not be applied at first, the irritant influence of some narcotics being so great as to cause inflammation in the part, and thence to check absorption. It should be gradually augmented as the habit got accustomed to it; and when the desired effect had been produced, the dose should be as gradually diminished. With respect to the part of the skin to which the narcotic was to be applied: when the local influence only was required, the blistered surface should be that directly over the seat of the pain; when the general effect was to be produced, it should be as near to the head as possible. One advantage of the endermic method over the internal administration of powerful narcotics was, that of obtaining the full influence of the narcotic without any chemical chang

being produced upon it, such as must, necessarily, often occur when it was taken into the stomach: another was, that the digestive function was left undisturbed: and a third was, the power which we possessed of restraining the too great activity of the narcotic by the application of an exhausted cupping-glass over the part to which it had been applied. For, although this would produce no advantage if the whole of the narcotic was already taken into the system, yet, if the hurtful influence of it was displayed when it had been only partially absorbed, the cupping-glass effectually checked its farther absorption.

Besides narcotics, he had advantageously administered other remedies by the endermic method; namely, strychnia, extract of colchicum, and iodide of iron; but he should confine his present remarks to the salts of morphia. In the greatest number of cases the hydrochlorate was employed; but, when an anodyne influence was especially desired, the acetate operated better, more efficiently in allaying pain, and in a shorter period of time than the hydrochlorate, probably owing to its deliquescent property. When the salts of morphia are applied to a denuded surface, they excite a burning heat in the part, a fact which might, *à priori*, be expected, as all stimuli cause sensation in nerves, whether entire or mutilated, so long as the irritated portions maintain their connection with the brain or the spinal chord. In this case, the chemical irritant property of the salt acts on the excitability of the nerves, and causes pain; but, after a short time, the effect thus produced ceases, and the sensibility of the nerves is deadened. Some change, although not an obvious one, is produced in the material composition of the nerves; a loss of susceptibility of impression is the consequence, and neuralgic pains are thus lessened, or they wholly disappear. Now, were narcotics administered internally in doses sufficient to produce such effects, they would give rise to the same injurious consequences as result from morbid or excessive stimuli, and they would tend to annihilate the vital force; whereas, when endermically used, much of their influence is exhausted in their local action on the affected nerves. That such a local action exists there could be no doubt; for, independent of the experiments of Humboldt, Müller, Wilson Phillip, Brodie, and others, which had demonstrated the local influence of narcotics on the nerves, we cannot ascribe to any general action, nor to absorption, either the influence of belladonna upon the iris, when it is applied to the eyelids, or that of carbonate of lead upon the wrists of those who work in lead. In these cases, although the narcotic reaches the nerves of the iris and those of the wrists by imbibition, yet it is evidently a local influence which is exerted, for the pupil of the other eye remains unaffected, and although the wrists are paralysed, the power of volition over the nerves continues. Were any other proof requisite, he had only to mention the experiment of Müller. He dissected out the ischiatic nerve in toads, and left the leg connected to the body only by that nerve. He next immersed the leg and nerve in a strong watery solution of opium; both were paralysed; no contractions of the muscles could be excited by the galvanic, nor by any chemical stimulus. In another experiment, he immersed the bared nerve only in the solution of opium, after which the galvanic or a mechanical stimulus excited no contractions in the muscles, when applied to the upper part of the nerve, but convulsions were produced when the nerves were excited from below,—a fact clearly demonstrative of the local influence of the narcotic. It is still further probable that in every instance where there is a general action of the narcotic, this is dependant upon its absorption; or, in other words, that it operates through the medium of the blood, whether the narcotic be taken into the stomach, or applied to a denuded surface. It might be supposed, however, that, in that case, the influence of the narcotic in the part was propagated through the nerves; but the experiments of Fontana and Wernschedt were sufficient to prove the incorrectness of that opinion. In the experiments of the latter, when the nervus vagus was divided on both sides, opium, introduced into the stomach, produced its influence upon the habit as readily as when these nerves were entire; and this result was confirmed by the experiments of Brodie, Emmert, Delille, Wedemeyer, and Viridet.

These facts were sufficient to demonstrate that narcotics endermically administered acted both locally and generally; and from experiments which he, Dr. T., had made, he had no hesitation in affirming, that when salts of morphia were applied to a blistered, or otherwise denuded surface, the narcotic might either exhaust itself locally, or it might be taken into the circulation, and operate upon the cerebro-spinal centres as rapidly as when it was introduced into the stomach. The time required for the imbibition of a narcotic thus applied, in order to reach the capillaries, and to enter the circulation, was stated by Müller, in his "Elements of Physiology," to be less than a second; and as the blood circulated through the whole body in half a minute, if Herring's calculation was correct; or from one to two minutes, according to others, it was not assuming too much to suppose that a narcotic placed in contact with a part freed from epidermis, might be distributed through the circulating system in a space of time between half a minute and two minutes. In some of the instances in which finely-

powdered hydrochlorate of morphia was sprinkled over a blistered surface, the influence of the narcotic was felt in the head in less than a minute. He might here enumerate the symptoms which indicated the general influence of the narcotic, thus applied, upon the cerebro-spinal centres; but he preferred leaving these to the details of the cases, illustrative of the practice, which he had selected to lay before the students. He might, however, mention, that when the nerves were topically affected, as in neuralgia, the general symptoms scarcely ever displayed themelves.

Such was the physiological action of narcotics applied to the denuded surface of the body, which had hitherto been recorded; but there was another action produced by at least one of these, namely, hydrochlorate of morphia, which had not, to his knowledge, been previously observed, and to which much of the advantages derived from its application, in a therapeutical point of view, was to be attributed. He referred to the production of a papular eruption, terminating in pustules, which spread from the immediate vicinity of the part in which the hydrochlorate was applied, all over the body; and it was more or less attended with œdema. In some instances the swelling, when the blistered surface was in the vicinity of the head, had been so considerable as to close the eyes, in a manner similar to that which occurs in erysipelas of the head. It had also been attended with some degree of fever; and in a few instances delirium had displayed itself when the eruption had reached its acme. It seemed to operate as a most powerful and efficient counter-irritant, without, apparently, interfering with the narcotic influence of the hydrochlorate. The eruption was a pustular one, and he had observed that the relief was most obvious as soon as the pustules were fairly formed; indeed, so striking had been the beneficial influence of this eruption, that he was inclined to accord with the remark of Dr. Jenner, that "every pimple with a vesiculated head had an errand to perform for the benefit of the constitution."

He had selected the preceding cases from a great number. The first three were intended to illustrate the local influence of the endermic application of the salts of morphia; the other two, their general influence. His object in bringing forward these cases was, to direct attention to the endermic practice which promised many advantages; and which only required to be investigated to gain the support of British practitioners.

POWER OF DILATING THE MOUTH OF THE WOMB POSSESSED BY THE ERGOT OF RYE.

To the Editor of THE LANCET.

SIR:—Should you deem the accompanying remarks on the use of the ergot of rye worthy of a place in your widely-circulated Journal, your insertion of them will oblige, Sir, yours respectfully,

T. H. WARDLEWORTH.

Rochdale, March 4, 1839.

The cases which I have published, and which are now before the public, tend to show, in a remarkable manner, the powerful effects of the ergot of rye; for, in Mrs. R.'s case,* after all other means had failed, the ergot at once produced pains of a more truly uterine character than had previously existed, evidenced by a further protrusion of the membranes, the os uteri becoming shorter, and gradually dilating, all of which went on progressively until the process of labour was completed; showing, in this case, the effects of the ergot in producing dilatation of the mouth of the womb, a property imputed to it by Chevreuil, who has reported sixteen cases, in which the ergot seemed to soften and dilate the os uteri. The following case, which I was called upon to attend, on the 4th of July, 1838, at four, A.M., is one in which the ergot had a most decided effect upon the os uteri.

Mrs. K——, æt. 28, a stout and healthy woman, in labour of her second child; on examination I found the os uteri dilated to the size of a crown-piece, thick, and unyielding; on inquiry I found that my patient had had pains for more than two days, and which had returned at irregular intervals during that time. Her pulse being full and strong, I bled her to ℥xx., which was followed by considerable relief. After waiting some time, and the pain not returning, I left her, and desired to be sent for on the least return of pain. About six, P.M., same day, I was again sent for; on examination I found the membranes protruding beyond the os uteri, which was much in the same state as described at my last visit, from the restless condition of my patient, and her friends, who, in fact, desired me to give her some "coffee."† From a knowledge of its efficiency in similar cases, I at once acceded to their solicitations, and I accordingly gave Mrs. K—— ℈j. of the ergot, and in ten minutes the pains became more frequent, the mouth of the womb softer, and more dilated; for, in half-an-

* Vide LANCET, No. 8, vol. i., 1838-9.

† As the ergot is called in this neighbourhood.

hour after the ergot was taken, she was relieved of all her sufferings, by being delivered of a fine son; they both did well.

In this case might not the ergot have been given when first called in? for what advantage was there derived from the bleeding? only a few hours relief from pain; when the woman, from the timely administration of the ergot, might have had her anxiety removed,—her sufferings mitigated, by its being given.

There are a great number of practitioners who are of opinion* that the ergot, instead of causing a softened condition of the os uteri, produces a rigid and unyielding condition of these parts, thereby producing a prolongation of the parturient process. I could enumerate several cases more to prove the efficiency of the secale cornutum in producing dilatation of the mouth of the womb; and I have no hesitation in stating that the ergot, *if good*, may be administered when the os uteri is only dilated to the disc of a shilling, its edges thick and unyielding, provided the ergot is given in doses of 15 grains, and repeated according to the effect produced.

I have found the ergot, when given under the above condition of parts, to be twenty minutes before its action has been manifested; and I have invariably observed the action of the ergot, when fully produced, to continue until the os uteri has been adequately dilated, when in most cases an arrest of the fœtal head is experienced in the lower aperture of the pelvis, caused, probably, by the uterus being exhausted from its continued action. Under such circumstances 15 grains of the ergot will not be sufficient to excite the uterus again into a state of contraction, so strong as to effect delivery of the child; therefore, it would require at least ℈ij. to ʒj. of the ergot to produce an action of the uterus sufficiently powerful to expel its contents. For, since the first introduction of the ergot to the notice of the obstetrician, there has been, even up to the present time, such a discrepancy in the results given by different practitioners of celebrity, that it would (viewing all the circumstances together) cause any one about to embrace the advantages that are to be derived from its use, to pause ere he attempted to give so powerful a remedy to a parturient patient, for fear of producing some of those direful phenomena which are represented to follow its administration, viz., rupture of the uterus, hour-glass contraction, and often fatal effects on the child, as remarked by Dr. Hosack, an American writer, when saying that the ergot is the "pulvis ad mortem." "For I believe," says he, "that its operation, when sufficient to expel the child, in cases where Nature is alone unequal to the task, is to produce so violent a contraction of the womb, and consequent convolution and compression of the uterine vessels, as very much to impede, if not totally to interrupt, the circulation between the mother and child." Were this statement corroborated by other writers on its parturifacient effects (so denominated by Mr. Pereira), it would then be an excellent agent in the hands of the votaries of that detestable scheme, the author of which has thought very proper to hide himself from public derision and contempt, under the name of "Marcus." Then might the advocates of that most abominable system take advantage to thin the population by destroying "in utero" the innocent victims of their wicked designs, by the silent and unseen use of the ergot.

However, I agree with Drs. Chapman, Dewees, and James, all of whom are American practitioners of eminence, that the ergot has no deleterious effect upon the child, for in 1500 cases wherein I have had occasion to have recourse to the ergot, only twenty out of that number were stillborn, and the epidermis of all these could be easily removed by the gentlest possible friction with the finger, showing that they were rapidly advancing towards decomposition.

Such are the principal objections that are brought forward against the administration of the ergot, and which I am sure could only have arisen from too superficial an acquaintance with its action; for, in the practice of those who have used the ergot extensively, they have extolled it as a boon to the philanthropic inquirer, and one which has for its object the alleviation of that painful process—labour; for every practitioner is, or should be, glad to avail himself of such sanctioned improvements as may have a tendency to relieve the sufferings of humanity, and shorten that process, "labour," with safety, which is at times attended with so much anxiety.

I wish not to be understood, from the foregoing observations, to deprecate that which every practitioner in midwifery ought above all things to possess—"patience;" but when we see a woman's physical and mental powers depressed, from hours, nay, even days, of suffering—when anodyne after anodyne has been given without any alleviation of pain, I say, under such circumstances as these, if the os uteri be at all dilated, pelvis well formed, and the practitioner in attendance does not avail himself of that which he has in its power to administer, he is not worthy of the name of a medical man. I am not lauding the use of this important therapeutic remedy beyond its merits, as it is deserving of the most serious attention of the faculty.

The following is my practice when called to a woman in labour:—When, on examina-

* Vide a paper published by Mr. Keane, in the "Medical Gazette," for Jan. 26th, 1839.

tion, I find the os uteri at all dilated, and the woman has had pains, the osseous structure normal (*i. e.*, the pelvis), the pain returning at long intervals, &c., after duly observing the temperament of my patient, colour, and solubility of the infusion of ergot, I at once give her accordingly 15 grains of the ergot in ℥ss. of tepid water, and, as I have before mentioned, its action is not so soon perceived as in a more advanced state of labour, generally occurring in about twenty minutes after its administration, manifested by a continual pain* referred to the pubic and iliac regions, accompanied with a continual desire to evacuate the contents of the rectum and bladder; this state of things continues until the mouth of the womb is dilated, when the membranes invariably rupture of themselves. Should the second stage of labour be protracted by an arrest of the fœtal head, in the lower aperture of the pelvis, the ergot may be repeated, as mentioned at the commencement of this paper.

I wish not to be understood, from the foregoing remarks, to advocate the administration of the ergot in all cases of labour; for instance, in distortion of the pelvis, "whether that may have arisen from mollities ossium or rachitis," at the full period of utero-gestation. *In placenta-presentation*, if the presence of the hand in utero is not sufficient to excite the uterus to contraction, when, after securing the breach at the os externum, pain does not come on, the administration of ℥j. of the ergot may be productive of considerable benefit. All I wish to impress upon the minds of my professional brethren is, that the ergot is a most valuable acquisition, when properly given, in aiding the parturient process, for I am confirmed in my previous suggestions by practical observation and not by any hypothetical notions I have formed respecting its utility. A zealous practitioner, however, will not adopt the opinion of any one without scrupulous examination, but he will endeavour, by study and reflection, to obtain a comprehensive knowledge of any therapeutic agent, in order that he may be able to form a rational conviction of its utility. "Every man," says Gibbon, "who rises above the common level, has received two educations, the first from his teachers, the second from himself;" and, as medicine is not one of the exact sciences, no one really anxious for its improvement ought to conceive it a degradation to retract any erroneous opinions which he may have formerly advocated.

I have lately had under my care a severe case of chronic bronchitis, attended by copious expectoration of a diaphanous tenacious phlegm; on applying the stethoscope under each clavicle, the mucous râle, almost amounting to "gargouillement," was audible, which symptoms rapidly yielded to the following formula:—

Tincture of ergot of rye, two drachms;
Syrup of poppies, half an ounce;
Water, one ounce and a half.—One drachm to be taken every second hour, or when the cough is troublesome.

* Yet, in some cases, the pain occurs in a few seconds, with an evident intermission.

ACTION OF THE ERGOT OF RYE.

To the Editor of THE LANCET.

SIR:—I beg to transmit to you the few following facts regarding the secale cornutum, hoping that they may not be altogether unworthy of a corner in the columns of your widely-circulating periodical. I remain, Sir, your obedient servant,

RICHARD COLLIER,
Senior Surgeon to the Impl. B.M.A.,
Gongosoco, Brazil.

Nov. 20, 1837.

If we reflect for a few moments on the very early age at which, in this country, females find themselves called on by desire or duty to assume maternal functions, and if we bear in mind that solitary sort of life to which the softer sex are here drearily doomed, even without taking into account the enfeebled frames entailed on many of them from hereditary disease, it surely cannot create surprise should females of fourteen or fifteen years suffer severely in their first confinements. Yet, I must candidly confess, so far as my humble experience extends, those childbirth cases calling for surgical aid have been "few and far between;" so that now, after a residence here of four years, only three such came before me, to two of which I shall briefly allude, as illustrating the very valuable aid accruing from a due administration of the ergot of rye in those tedious, lingering labours, which make such rapid inroads on an already delicate and feeble female, and to such secale cornutum can, in my mind, be given with the pleasing prospect of the most satisfactory success.

Well aware, too, that many a pregnant patient here falls a victim to ignorance and timidity, and strongly sensible of their undiminished dread of instruments, I am the more willing to give any additional proof of the now acknowledged efficacy of the secale cornutum, completely convinced, as I am, that in the proper administration of this valuable medicine, the anxious accoucheur shall frequently find a silent, satisfactory substitute for the much-feared forceps.

The few trifling throes attendant on labour in the generality of negro women, compared with those of more civilised life, are too familiar for comment; hence it is that this extensive establishment has afforded me

only one isolated case. Having observed that negro women in general give but trifling trouble during delivery, I should not omit stating that I have seen very poignant pains preceding their abortions, which latter are of frequent occurrence.

I may here notice that the third case was that of a very respectable lady, who died undelivered, in her second confinement, before I could reach her residence.

Case 1.—At 5 o'clock in the afternoon of December 11, 1835, I was called to hospital to see the negress Paula Congo, whom I found feeble and much weakened, though only a few hours in her labour, which was considerably advanced, the child's head being far down; the parts were lubricated and soft, though in her first confinement. When the pains came they did not continue in their full force, half their efficacy being lost by the patient's debility. Finding her pulse low and fluttering, I gave her one ounce and a half of port wine, well mixed with warm water and sugar. She had had a little, also, from the nurse, previous to my seeing her. At 7 o'clock, P.M., I observed her sinking, and tossing herself about in a very agitated state; unwilling to give any stronger stimulant, yet anxious, from her great debility, to expedite her labour, I lost no time in making an infusion of the ergot of rye, in the proportion of two drachms to six ounces, of which two tablespoonfuls were to be taken every fifteen minutes. She had occasion to take only one dose, the action of the uterus becoming good and regular, and thus enabling her to give birth to a living child at 8 o'clock, P.M. Two hours after this, seeing her again feeble, and observing no efforts emanating from the womb to propel the placenta, which I found very high up, I gave another wineglassful of mulled wine; at 12 o'clock, not noticing the placenta to progress, and again apprehensive of supplying stimulants, seeing blood pass in very considerable clots, I ordered the nurse to give the infusion as before, but not to go beyond a second dose until my return. Coming back two hours after midnight, and observing no change, I now gave her the medicine every quarter of an hour, and after the eighth dose (*i.e.* 4 o'clock, P.M.) the uterus began to act, and the placenta passed out without occasioning any hæmorrhage. After this she got on very well, and has since so continued. She is about 18 years of age, middle-sized, and rather delicate in her appearance.

Case 2.—A few days since (Nov. 14, 1837) I was requested to go over to Taboleiro, a hamlet adjoining this estate, to see a Brazilian, aged about 16 years, in her first confinement. On the morning of the 11th her labour commenced, and after much severe suffering the entire of that day, the pains of labour left her, but in their stead she had pains in the stomach, which continued up to the moment of delivery. Her husband told me that from childhood her stomach gave her much pain from time to time.

I found her very weak, with foul tongue, her bowels but indifferently acted upon, and herself a martyr to the most agonising apprehensions. The irritable state of her stomach would not admit of a purgative, so being able to procure some salts in a neighbouring hut, I had them immediately thrown up into the rectum, having previously ascertained that the child's head was pretty low down, and in a proper position. As the waters came away during the first hours of labour, the outlets of the womb were dry, and destitute of that lubricating mucus so satisfactory in childbirth. The enema was retained, and, acting after some time, gave her much ease, whereupon I was not slow in infusing two drachms of the secale cornutum in six ounces of boiling water, of which infusion I now gave her one-fourth, and in fifteen minutes more nearly a like portion, and now (Tuesday afternoon) the pains of labour set in regularly and satisfactorily, though they had left her since Saturday evening; after an interval of an hour she began to vomit, and did throw up some of the medicine, but as the pains were becoming more remiss, I gave her from time to time the remainder of the infusion, which brought back the pains in full force, and the vomiting returned only twice. About five hours from the time she first took the infusion a trembling came on, which induced me to use a little manual dexterity in aiding the child's head, now partly protruding; it must have been dead many hours. Having well wrapped up the mother in warm blankets, the trembling ceased; shortly after delivery she again vomited, and then became tolerably tranquil, in which state I left her, being obliged to return hither. On the 15th, her husband came to tell me that her bowels were not acted upon since the day before, and that the placenta had not yet passed, but that in other respects she was going on very well, adding that she passed a good deal of blood. I sent some castor oil, which acted nicely upon her bowels, but the placenta was still retained. On the morning of the 16th, learning that the placenta had not yet come down, I rode over very hastily, hearing on the way that she had convulsions, which on my arrival I found to be merely rigors, such as had preceded delivery. I had with me only one drachm of the ergot. My directions had been sadly neglected, so that I was obliged to put on a new binder, and apply my hand over the now flaccid womb, and again administer the medicine, whereby I succeeded so far as to render the womb firm and hard; she now enjoyed a short sleep, having had no rest during the previous night. On her awakening I resolved upon

extracting the placenta, particularly as I had no more ergot beside me. The placenta powerfully adhered to the womb, so much so, that it called forth much strength to detach it. I found it a granulated, half cheesy, half scirrhous substance, breaking down under my fingers during examination; in one part only the blood-vessels seemed gorged; the other parts were palish, presenting an uniform appearance. Her pulse had been 120 before the placenta was removed, but it afterwards fell considerably; the blood following the extraction was a mere trifle. After this she got on beautifully, her appetite becoming good; her husband twice each day brought me the most satisfactory accounts, always, however, importuning me to give his wife some medicine to prevent future pregnancy. The accounts, yesterday (Nov. 19) were most gratifying. I fear I have too far trespassed on the pages of your very valuable Journal,

R. C.

P.S.—Nov. 26th. Riding out to-day I was suddenly shocked by being told that the husband a few days ago applied to some ignorant individual to give his wife something to prevent pregnancy; herbs were given, and, horrible to tell, the poor woman soon was no more! Whether the herbs were of a very purgative or poisonous property, I have failed in discovering: I am, however, happily and clearly convinced they were not given with any murderous or evil intent.—R. C.

CASE OF UTERINE HÆMORRHAGE,

ILLUSTRATIVE OF SOME OF THE EFFECTS OF LOSS OF BLOOD.

To the Editor of THE LANCET.

SIR:—May I request a space in your Journal for the following case, which is fully and clearly demonstrative of some of the effects of loss of blood. It is not so much to the consequences which immediately resulted from the hæmorrhage, as to those which became evident at a remoter period, and which signified the endeavours of the system to recover from exhaustion, that I would direct the attention.

Mrs. K., ætat. 27, of pale complexion, nervous temperament, and prone to hysteria, was delivered, three years ago, of her first child, since which she has twice miscarried at the close of the third month of gestation. She had advanced to between the third and fourth month of pregnancy, and had been exposed to causes of mental anxiety and bodily fatigue. The 2nd of February she walked a long distance, and tired herself greatly. During the night of the 3rd, uterine hæmorrhage commenced, and this had persisted, with more or less violence, until the 5th, when it increased, and her danger was now so apparent to her attendants, who had hitherto contented themselves with waiting for the termination of the abortion to arrest the flooding, regardless of the prostration of strength which it was inducing, that they sent hastily for aid.

On visiting her I was at once struck with the pale, lifeless-looking countenance and the absence of everything denotive of vigour and animation; the lips were blanched, the eye was vacant, the breathing was at one time scarcely perceptible, at another catching and suspirious; the pulse was small and feeble, and with difficulty felt; the mental faculties were involved in the general prostration. I instantly gave her some brandy, which restored her for a while; but she sank again almost directly, and laid insensible to all around. The exact amount of hæmorrhage which had occurred was of course unascertainable, but of late it had been copious; it had now ceased, the abortion was completed, and the obvious and pressing indications were to rally the powers of life, which seemed well nigh exhausted. I administered brandy freely, and its effect was as striking as it was transient. Each time she took it she recovered surprisingly; the frame seemed vivified with a new energy; a colour diffused itself over the blanched countenance; the eye was lighted up, the skin felt warmer, she could recognise her friends and answer queries with correctness, although in a startled and hurried way. She was alive to her danger, and anxiously expressed her dread of dissolution; more than once she exclaimed,—"O! pray do something for me; I shall not recover!"

The signs of rallying were indeed as fleeting as they could be. Shortly after she had drunk the cordial the stupor returned, the look became fixed and unmeaning, and though the pupil contracted when a light was presented, no annoyance was expressed at its proximity; the ear was impressed only by loud and pointed tones, and when sounds were audible she was aroused, evinced a flurried and bewildered manner, as though she had awakened from a troubled dream, and was again unconscious as before. There was a state of stupor which was descriptive not of the quiescence of organs merely, but the failure of their functions, and this by being occasionally interrupted by startings, tossing of the arms, and other signs of restlessness, was rendered still more alarming. Throughout the day she continued much in the same condition, being at times pulseless, and evincing no change for the better except when rallied by stimuli, the frequent and persevering exhibition of which enabled the vital organs, but imperfectly, to sustain their functions. Towards the evening vomiting came on; the stomach rejected everything the instant it was swallowed; the signs of

restlessness, which have been noticed as interrupting the stupor, were increased, and a convulsion ensued which agitated the frame with violence, and threatened to prostrate, finally, what little strength remained. Half a grain of opium was given in a pill, was unexpectedly retained, and the vomiting ceased. During the night nothing seemed wanting to make more perilous the situation of the patient, her countenance being a long time white and ghastly, her lips livid and apart, her mouth open, her eyes inanimated and surrounded by a blue circle, her forehead bedewed with moisture, her extremities cold; the pulse was feeble in the extreme, and sometimes indistinguishable; the falling of the jaw betrayed the muscular debility which existed. The livid appearance of the features was not to be wondered at, for the blood could not have been properly oxygenated, when there was a state of the breathing organs in which the thoracic movements were all but imperceptible; sometimes they were quite so; and the respiratory murmur was hardly to be heard. The catching and sighing which interfered with this kind of breathing, seemed at once denotive of the embarrassment which attend the respiration, and needful to arterialise the venous blood.

Stimuli were perseveringly administered, and the hope that their influence, which was but momentary, would soon become more permanent, was at length realised. In the morning (Feb. 6) an amelioration appeared; the surface was warm, the circulation had rallied, the breathing was more equable, and no longer suspirious; the mixture of paleness and lividity, which gave the countenance a death-like aspect, had yielded to a wonted intelligence of expression; the senses were resuming their action, and could be impressed without those marked efforts which a short time previously were required to produce perceptions which, when excited, were fleeting and confused. There was still a disposition to dozing, but there was nothing like stupor or unconsciousness. The patient was aware of her improvement, and expressed herself in hopes of recovering. These signs of revival became more and more promising. In the evening the vomiting returned, but it was quieted by two drops of hydrocyanic acid; the feel of syncope was yet much complained of.

Feb. 7. The night had been passed restlessly; she had suffered turbulent dreams, which had much disturbed her, and from which she had awoke alarmed and terrified. Nothing could present a greater contrast than her former and present symptoms, which were plainly those of reaction. The disposition to repose and stupor was exchanged for excitability and watchfulness, and there was an over action of those functions which had seemed as enfeebled as they could be on this side cessation. The face was flushed, not continuously, however, for at times it was pallid; the arteries were energetically contracting, as was proved by the beating of the carotids, which was visible to the eye, and the quick and violent action of the radial and temporal arteries; the heart beat tumultuously, and there were violent pulsations in the epigastrium and course of the abdominal aorta. This condition of the vessels had occasioned an exalted performance of the offices of organs, which was painful and distressing. There was acute pain across the forehead; the head felt as if something were bound around it very tightly; light was intolerable, and she was much agitated by sounds, complaining particularly of the shutting of the door and sudden noises. She felt a pain in the side and precordial region, which she described as shooting and throbbing, and also experienced an uneasy sensation in the larynx. All the symptoms were much aggravated by elevating the head from the pillow, and the effort endangered syncope. The room was ordered to be darkened; perfect stillness, and a strict maintenance of the recumbent posture were enjoined; the quantity of stimuli was diminished, and they were given in a more diluted form.

The two following days (Feb. 8 and 9) the amendment was but trifling. The treatment was continued.

The 10th, it was reported that she had been seized with a convulsion, during which sensibility was suspended, but its duration was short, and the extremities were not much agitated; there was obstinate vomiting. Two drops of hydrocyanic acid were given, but rejected directly. In three hours the dose was repeated, and the sickness subsided.

Feb. 11. The pain in the head was much aggravated, and there was a dread of raising it; the organs of sound and vision were intensely excited; there was an augmented tendency to syncope. The effect of position on the pulse was remarkable; the removal of a pillow from beneath the head, which had been thoughtlessly elevated, immediately reduced its beats from 130 to 120. Not less worthy of notice was the influence of the change of attitude over the cerebral and thoracic symptoms, any variation from the horizontal posture heightening their severity. The pulsation in the epigastrium, and course of the abdominal aorta, was very distressing, and was a symptom of which she greatly and long complained. Nourishing diet was taken with benefit.

Feb. 12. She was altogether better; the sleep was longer and placid, and she had awoke refreshed; the circulation was much less accelerated, and the painful sensations had greatly diminished; she was more cheerful in countenance, and expressed herself better. From this time the amelioration, though gradual, has been uninterrupted.

The patient is still pale, enfeebled, and unable to bear disturbance, or engage in any active duties.

This case is deserving of consideration; first, as pourtraying the shock, the mental and physical prostration, which resulted from the hæmorrhage, and more especially as evidencing the excessive reaction which supervened from the efforts of the system to recover from depression,—those efforts being attended by a general arterial action, and a degree of acute pain in different regions which, separately viewed, would doubtless have suggested the lancet as the chief remedy. This conclusion, however, would be out of question when the entire train of symptoms is considered, when the history of the case, and the effects of remedies, are regarded as important features of inquiry.

The same cause had originated symptoms prevailing together, yet seemingly opposite in their kind; if there was an energy displayed, there was also manifest a want of it; if there was great arterial action, there was combined with it an evident loss of muscular power; if there was constant pain in the head, exalting the senses, and rendering them intolerant of their appropriate stimuli, there was a feel of faintness which an erect posture would have converted to actual syncope, showing a prostration of strength and forbidding depletion; if there was advantage derivable from perfect stillness, a freedom from agitation and disturbance, which it may be said would also have followed had inflammation been present; there was also benefit derived from gentle stimuli and nourishing diet, which were given to the amelioration of the complaint, but which, administered in the case of inflammation, would have hastened its progress, most certainly would not have lessened its severity. A comparison of the details could not have led to a wrong inference; to have fancied the existence of inflammation would have been, probably, a fatal error,—nothing but a one-sided view of the matter,—nothing but a total ignorance of those symptoms so faithfully and perspicuously described by Dr. Marshall Hall, as denoting the remote effects of the loss of blood, could have misguided the practitioner, or exposed the patient to the fearful hazard which a wrong diagnosis must have infallibly occasioned.

I am, Sir, your most obedient servant,

W. Frederick Barlow, M.R.C.S.

March 16, 1839.

USE OF THE VECTIS IN CASES OF PROTRACTED LABOUR.

To the Editor of The Lancet.

Sir:—If you think the few following cases worth inserting in your Journal (they are cases copied from my note-book), and worth the profession's observations, they are at your service, and to make what observations you may deem fit or alterations. *

C. V. Field, M.R.C.S.

Rotherhithe, March 6, 1839.

CASE I.

Mrs. —— of Rotherhithe, 1824, was taken in labour with her first child, at the usual period of utero-gestation. When I was summoned to attend the amnion waters had been discharging some hours. Upon examination per vagina, the presenting part was the hand and arm, the hand in the vagina, the os uteri contracted round the arm of the child, its upper part near the axilla. I endeavoured to replace the hand or limb in the uterus, and allow labour to proceed in the natural way, but found that impossible, therefore resolved upon turning, and deliver by the feet, which was easily done by passing my hand to the fundus of the uterus and bringing the feet down, after delivering the body as far as the head, I met with great resistance in the head, owing to its resting upon the arch of the pubes, which was relieved by passing my fingers under the chin of the child and throughing the head into the hollow of the sacrum, by that means the head was easily extracted. The child was born dead, "mother did well."

CASE II.

Mrs. —— of R., was taken in labour of second child at the full period, when I was requested to attend her, and found upon examination per vaginam the hand and two folds of the umbilical chord in the vaginæ. I presumed the child to be dead, owing to pressure on the funis, and the only chance of delivery was by version or turning the child in utero, the usual practice layed down by the ancient and modern practitioners, in all such cases. The child still-born, mother did well.

* In an additional note Mr. Field says,—"The cases are copied by my assistant from my note-book. If there are errors and is to lengthened, you are at liberty to place them in the form for printing. I shall forward you more cases at my first opportuny having been a taker in of you journal sinc the first of its comg out." As Mr. Field is a member of the Royal College of Surgeons in London, and should be fully competent to write, or revise, for himself, and as our alterations might seriously affect the *originality* of the communication, we insert the "cases" intact, simply expressing a doubt whether Mr. Field's assistant is entitled to the credit of having made anything more than a strictly faithful copy from the note-book. We should have judged, however, by the manuscripts, that Mr. Field was his own amanuensis.—Ed. L.

Mrs. ——, in 1826, of Rotherhithe, was taken in labour of her first child. I was requested to attend upon her, and found upon examination the face to present with the hand flat over the right ear of the child. Patience I considered would be prudent and wait result. Violent hemorrhage came on, I became uneasy as to the result, and the mode of practice, as the face was low down, and the hand advancing. I endeavoured to replace the hand, and bring the head down with the *vectis* or lever, which was readily done by placing the lever on the occiput by drawing the instrument downwards in course of the axis of the pelvis. She was safely delivered of a living child.

Malposition of the child, head or face.—Many authors advise perforating, more particularly if the head cannot be adapted to the pelvis. My opinion either the vectis or version, I should prefer and have adopted, rather than perforated, and have saved many children without the slightest bad consequences. Read Douglass Merryman et Ryan.

CASE III.

Mrs. —— 1829, of Rotherhithe, was taken in labour of her first child, age 37, robust and healthy, when I was requested to visit her, and found the labour going on well but it would be some hours before she required assistance. About 8 hours I was requested again, the waters had been discharging some time. I found the labour advancing, therefore remained till it terminated, which was 12 hours; the os uteri rigid, external parts relaxed. I bled to 20 oz. with benefit, and administered liq. opii S P xxv. The os uteri instantly relaxed, and the head descended slowly, the pains not sufficient to a safe delivery, therefore I introduced the vectis in my usual way. The rules I shall give in another part, being careful of the perineum which is and will be more or less lacerated, also getting a good purchase and being careful of the bladder and rectum. The child was born living after a tedious labour of 30 hours duration.

Mrs. —— of Rotherhithe was taken in labour of her tenth child, her medical man was requested to attend. After waiting some hours he requested my attendance, and his note expressed to bring my midwifery instruments, for he had bad case. Hastened and found the lady alarmed, and all around crying, my friend in a fever; in a few minutes eased their minds, and said all will be well, and proceeded to ascertain the state of things, and found it was just a case for the vectis. I delivered the lady in half an hour, safely, the child living and mother did well. This lady always had excellent times and easy labours, but this child was larger than her usual children, and the pelvis smaller than usual for so large a child, but no deformity. The child weighed 10¼lbs., she was 20 hours in strong labour.

CASE IV.

Mrs. ——, a midwife of experience, requested my attendance owing to a tedious and difficult case she had under her hands, and had been with the poor woman a day and a night, however I did not hurry but called in my round. Upon examination found the head impacted in the pelvis and presenting right. I tried traction for some time, and thought to leave the case to nature, to see if the head would adapt itself to the pelvis, after one hour's endeavouring, unavaling, I resolved to use the vectis, and met with great difficulty in the introduction and getting a good purchase, owing to the rigidness of the os uteri, the poor woman exhausted, crying for help. Bleeding would not have relieved her, pulse small and weak, bladder distended, and great difficulty in drawing off the water, however I was not to be beaten, and succeeded at last, of delivering my poor patient, of a living child, with the vectis, after great difficulty in two hours great exertion. Mother and child did well after 48 hours labour.

CASE V.

1829, I was called to attend Mrs. ——, Kent-road, who had been in labour upwards of 20 hours, the arm presented. Mr. —— had been called some hours before I arrived, and had made attempts to turn the child, which he had continued for some time, without success. On examination I found the arm pushed through the external parts, the shoulder pressing firmly upon the perineum. The exertions on the part of Mrs. —— were very strong. I ordered her to be bled, and while the blood was flowing I readily passed my hand into the uterus and brought down the feet, the child was born dead, and always will be in such cases if the least delay, in version of the child and not expert midwifes.

It is nearly 17 or 18 years since I commenced practice in this neighbourhood, and it has fallen to my lot to have had some experience out of 3400 cases. I never have had one consultation, and have been so far fortunate.

Note.—Some of my neighbours reprobate the use of instruments, certainly those who are not *skilled* in the use of them, but I will quote every author on the use of them, with their own words. The use of the instruments is from their abuse, not use, and I maintain that the delay to apply them and the slowness in their application and use produces the mischief, where the proper application the mothers life and that of the child will be both saved, and I have seen many cases. Quote Douglass, Sims, Merryman, Denman, on the vectis, and its value. Read Dr. Ryan's observation, on the neglect

of not using instruments, say the vectis, in proper time. Vide Baudelocque, Denman, Hamilton, Gaynor, and my worthy and much respected friend Dr. James Blundell.

I should be sorry to publish the faults of others who from ignorance, and condemn in others what they are guilty of themselves, I wish to impress this deeply on the minds of *young practitioners*. A case reported 1788 to Royal Academy of Surgery, a most alarming example of ignorance of certain surgeons, in midwifery, they tried every instrument but the right one, they first crushed the head in the pelvis, the woman seemed without resource, the author of the observations, as unskilful as those that preceded him, performed the Cesarean operation, and not being able to bring back the head from the bottom of the pelvis, adds he cleared the neck of uterus, then recourse to the section of pubes to extract it the natural way, then failed, what remains to be done. He divided the child's neck in the uterus by the opening made by Cesarean operation and extracted the body through it, and the head afterwards by the natural passage. The poor woman lived long enough to go through the various operations of simple impacted head or locked in the pelvis of these wounderful surgeons which the vectis would have at once done or accomplished, upon a section of the pelvis they found the small diameter of the superior strait but two inches and half, the oblique three and half, and the transverse three inches and two lines, there is a case "similar described in 1729 of locked head."

OPERATION FOR STRANGULATED HERNIA.

To the Editor of THE LANCET.

SIR:—As I am an advocate for the adoption of Mr. Aston Key's practice, of not dividing the sac in cases of strangulated hernia, and having forwarded to you a case some time ago, in which it proved successful, I trust you will allow me briefly to record the three following cases, in which I attempted it, though unsuccessfully, in all of which I was compelled to lay open the sac, in order to effect the reduction of the hernia. I am, Sir, yours truly,

W. HOWITT, M.R.C.S.,
Senior Surgeon to the Preston Dispensary.

CASE 1.—William Sisson, æt. 50, was admitted a patient of the dispensary on the 25th of October last, labouring under all the symptoms of strangulated inguinal hernia; and, upon examination, there appears a tumour in each groin. He states the one on the left side has existed for the period of two years, and the other about half that time. He has never worn a truss, in fact, has suffered very little inconvenience from either. On the 21st, however, during a fit of coughing, the one on the left side suddenly increased, and became excessively painful, and was soon followed by sickness, hiccough, constipation, &c., all which symptoms have become aggravated up to the present time; the pain in the tumour, extending upwards into the umbilical region, being very severe, the part being tender to the touch. After several ineffectual attempts at reduction, by myself and colleagues, Drs. Alexander and Stavert, we deemed it expedient to proceed with the operation without any further delay, which I commenced in the usual manner; and upon exposing the sac, and separating it entirely from its adhesions to surrounding structures, I attempted its reduction, which, however, I found it quite impossible to effect, though the tumour could be moved freely in all directions, and appeared perfectly free at its neck. I then opened the sac, and completed the operation in the usual way; and all the distressing symptoms speedily disappeared, excepting the hiccough, which continued for a period of ten days, the bowels acting freely two or three times a-day from the time of the operation. The hiccough was ultimately subdued by the administration of large doses of acetate of morphia, after the usual antispasmodics had been exhausted. On November the 30th he was discharged cured.

CASE 2.—Martin Waterhouse, æt. 65, was admitted on the morning of the 30th of the same month, with all the aggravated symptoms of strangulated hernia, attended, also, with vomiting of an exceedingly offensive, dark, bilious matter. Upon inquiry, it appears that the tumour made its escape out of the abdomen during a fit of vomiting, which took place on the previous evening, from disordered stomach; he also states that he was operated upon thirty-five years ago* (which an extensive cicatrix clearly indicates), and has worn a truss from that time, though the hernia had never protruded for twenty years past. On examination it proves to be an exceedingly large inguinoscrotal hernia, which, after repeated and long-continued efforts at reduction, by myself and my two colleagues before mentioned, proving ineffectual, he was ordered gr. ij. of pulv. opii.; and when he was fully under its influence the taxis was again had recourse to with no advantage. The tobacco enema was then administered, which soon produced its full constitutional effects, and the efforts were again repeated, but proved of no avail. All the symptoms becoming more urgent, the operation was proceeded with immediately, and upon expos-

* For the same hernia.

ing the sac (which, with its contents, was very large) I separated it from its adhesions all round, and attempted to reduce it, which, however, from its narrow neck and large size, I found to be impracticable without laying open the sac, which I did, and exposed a large quantity of thickened omentum, enclosing two folds of blackened intestine. After freely dividing the stricture, both upwards and inwards, the gut, with a little manipulation, was replaced in the abdomen, as was also a portion of omentum, though the great bulk was allowed to remain in the sac. He passed a good night, with a total abatement of all bad symptoms, and, up to the 20th of November, progressively improved, on which day he was discharged cured.

Case 3.—Ann Waddington, æt. 62, a very fat, lusty woman, was admitted on Monday, Dec. 31, 1838, at four, P.M., labouring under very urgent symptoms of strangulated femoral hernia. On the previous Wednesday she had a severe attack of vomiting, and during that time the swelling in the groin made its appearance, attended with all the symptoms indicating strangulation. Bowels have been constipated ever since, though she has taken quantities of purgative medicines, which have always been rejected by the mouth immediately after swallowing them. The taxis, followed by a tobacco enema, and a repetition of it, were tried without effect; and, with the concurrence of Drs. Alexander and Stavert, I performed the operation in their presence, exposing a large and singularly-shaped rhomboidal sort of tumour, firmly adherent to the ligamentous and other structures adjacent to it, from which, by means of my fingers, I succeeded in detaching it, but was unable to return it, though I persevered in the attempt for a considerable time. I then opened the sac and divided the stricture freely, which was situated at Gimbernaut's ligament. The intestine (which was black and dull in appearance), was then returned, and a large piece of black and mortified omentum was cut away; the wound was then dressed in the usual manner. Although the more urgent symptoms abated, the bowels were never relieved, and she gradually sunk, and expired on the morning of Friday.

INQUEST ON THE

LATE MR. BOUTALL.—LETTER FROM MR. ANCELL.

To the Editor of The Lancet.

Sir:—In the report of the second inquest on the body of the late John Boutall, published in The Lancet of this day, there are one or two errors in the evidence as stated to have been given by me, which I shall feel obliged if you will allow me to correct.

In reply to a question by a juryman I am made to say, that I attended the deceased for some months previous to his death, my words being "*not* for some months previous to his death." I did not refer to any particular recorded fact of prussic acid found in the body after disease of the abdominal viscera,* but stated, generally, that the formation of prussic acid had been observed in persons affected with abdominal diseases. Lastly, I avoided the use of technical terms most studiously; the word "*lesion*," therefore, was not employed by me. To the best of my recollection, I spoke, verbatim, as follows:—"There certainly is presumptive evidence (of poisoning) from the existence of prussic acid in the stomach of the deceased; but I could have given a much stronger opinion had the examination of the body been carried further, in order that we might have been able to state positively, whether any of the appearances which usually present themselves of natural disease, as, for instance, in the head or chest, or those which occur after death from prussic acid, did, or did not, exist."

I may, perhaps, be allowed to make a few remarks upon the case, since it is plain that the Coroner and the jury considered that I had no sufficient grounds for any doubt upon the subject.

The medical witnesses were the first examined, and they had no facts to rely upon but those elicited by the post-mortem examination of the body; that examination furnished the court with one fact at most, viz., the existence of prussic acid in the stomach of the deceased five days after death. The question, therefore, comes to this,—Is the circumstance of poison being detected in the stomach sufficient to enable a medical man to affirm, and a jury to return a verdict, that a deceased person died from the effects of the poison? My answer is, No. We can only presume, from this fact, that the poison has occasioned the death, and we are then called upon to enter into the most patient scrutiny in order, if possible, to ascertain the truth. In corroboration of this, I will quote only one authority. M. Devergie observes:—"The demonstration of the existence of a poison does not prove the poisoning, unless the individual whom we suppose poisoned presents the symptoms and morbid appearances which generally coincide with the poison; whence it follows, that the symptoms and morbid appearances are as necessary to the affirmation of poisoning as the poison

* We have before us the short-hand notes of Mr. Ancell's evidence, in which we find the following words:—"One fact of this kind is recorded after disease of the abdominal viscera."

itself."* This general proposition is founded upon the following reasons:—

1. The poison may have been introduced into the stomach after death.

2. The poison may have been generated after death.

3. The most expert chemists may deceive themselves as to the results of their chemical experiments.

4. Although poison has been taken, death may be the result of supervening disease.

5. The poison may have been taken medicinally; the patient dying after disease.

6. The most deadly poison, prussic acid, has been shown to exist in the living body while labouring under comparatively trifling diseases.

The respectable jury assembled, in the absence of all advice from the Coroner, evinced considerable impatience at my evidence, so that I was prevented urging more than one of the above reasons for the qualified opinion which I gave as to the cause of death. Many circumstances conspired to render it more than ordinarily important to be exact in this case, most of which were known to the Coroner. I may mention the predisposition of the deceased to apoplexy; the length of time which elapsed between death and the examination of the body; the prejudice excited in the neighbourhood in favour of the opinion that the deceased took poison; the circumstance that the deceased employed prussic acid in his business, and the numerous rumours afloat that insurances, and other pecuniary transactions, would depend upon the cause of death.

Another subject important to remark upon is this:—Some of the jury intimated that they required only the *opinion* of the medical witnesses as to the cause of death. I observe, also, in the partial reports of the inquest in some of the newspapers it is stated, "two medical gentlemen gave their *opinion* that the deceased died from the effects of prussic acid." It was a matter of surprise and regret to me at the time, that the Coroner did not point out to the jury the difference between opinion in a medical sense, and opinion as considered by gentlemen of the law. Among the latter, the opinion of the higher functionaries is the law. "Lawyers consider their opinion as authority." With us opinion is quite a different thing. I am of opinion that John Boutall killed himself with prussic acid; but, according to Johnson, opinion means persuasion of the mind without proof or certain knowledge. I was asked by a juror to give my opinion, yea or nay. "The consent of the understanding was so far gained by evidence of probability, that it rather inclined to one persuasion than to another, yet not altogether without a mixture of uncertainty and doubting." From all I observed in this inquiry I have very little doubt that errors, in these courts, frequently result from the omission of the Coroner to correct the erroneous notions which jurors are apt to entertain as to the character of medical opinions.

The evidence to prove temporary derangement was, as usual in these cases,—it was elicited with difficulty. One witness, a shoeing-smith, believed his master deranged because he was unusually dejected, and he judged of this by his speaking on the morning of his death in a low tone of voice. A second witness believed him to be so because his memory was defective. The third and last was sure that he had fits of temporary insanity during the last week of his existence, and to prove it he put in a note written by the deceased, a few days before his death, in which, after hinting at his intentions, he concluded by saying,—"I am—mad—mad—mad." I do not know what our practitioners at Bedlam may think, but, in my opinion, the evidence at most proved that John Boutall was in that state of mind apart from insanity, which persons are usually in who contemplate suicide.

In a medico-legal point of view it is much to be regretted that the case was not recorded. From the experiments of Leuret and Lassaigne, prussic acid cannot be detected in the body of an animal killed by it, after the expiration of three days, provided burial has not taken place within 24 hours. This case *tends*, together with some experiments since made upon animals, to controvert the inference which has been drawn from the experiments of the above-named gentlemen, respecting the period within which prussic acid may be detected in the human subject. The peculiar constitution, and the strongly-marked temperament of the individual, would have also rendered it important. I am, Sir, your obedient servant,

HENRY ANCELL.

39, Albion-street, Hyde-park,
March 9, 1839.

* Medicine Légale t. 2, p. 437.

THE DRUGGISTS' "PROPAGANDA."

To the Editor of THE LANCET.

SIR:—A printed circular has just been sent to me, referring to resolutions passed at a meeting of chemists, &c., to remove alleged impediments towards keeping the Sunday hallowed.

I have now been in business nearly seven years, and during the whole of that period have never (but in urgent cases) kept my shop open on the Sunday, being convinced that a relaxation from business is not merely politic in the principals, but the birth-right of the dependants. I have also considered that the late hours to which druggists assist-

ants are doomed to work on the week-day, to the utter exclusion of the means of *intellectual* and moral improvement, show a general want of good feeling and liberality on the part of the masters. In no trade do I think such petty tyranny, and extortion of time and labour are exercised as in that of the chemist and druggist. Instead of keeping my assistants in a cold and cheerless shop, often unemployed, or engaged in trifles as an excuse for prolonging servitude, they are at liberty, at *seven or eight o'clock* every evening, or *even earlier*, to employ themselves as they please.

From these prefatory remarks you will perceive that I am a friend to freedom, and therefore ready to lend my humble aid to any plan for increasing individual liberty. But I must own to the Committee that I cannot but regard these resolutions as embodying something very *anomalous* and *suspicious*. It seems, by the first, that while the shops are to be closed, the assistant is to be *kept in waiting* to serve in cases of NECESSITY. Then, if he be confined, why should he be shut up without a ray of Heaven's light? Why is the *appearance* of freedom to be held out to the public, while the *reality* of slavery is kept up within, by the assistant being still confined to serve in cases of necessity?

What increases the suspicious aspect of No. 1 is, that No. 2, which is to grant the weary assistants liberty to go to bed at TEN O'CLOCK (almost the hour of midnight), was was carried only by a small majority!

This alone would demonstrate to me that kindness to the assistants is only an ostensible reason for some other purpose,—a mere pretext for carrying some underhand object. This object I can easily believe is to spread a spirit of unchristian asceticism and gloominess over the Sabbath, to increase its *scantity*, as it is termed, but in reality to subjugate conscience to the ideas of fanatical sectarians, whose narrowed minds know no happiness but in seeing everybody bound down to their set forms and ceremonies; who, in short, wish to be able (without loss to their pockets) to drive their assistants and servants from the confined limits of the shop, to the impure air of chapels and conventicles.

I am, Sir, your obedient servant,

C. R. S.

March 7, 1839.

MOTION OF MR. O'BRIEN, M.P., AND THE DUBLIN HOSPITALS.

To the Editor of THE LANCET.

SIR:—When I address so tried a reformer as you, I need make no introduction to the abuse to which I beg to direct your attention. Mr. W. S. O'Brien has moved for returns from "the infirmaries, fever hospitals, and dispensaries" in Ireland, but he has, unwittingly, no doubt, omitted to include the *hospitals* of Ireland. Now, to a casual reader, this omission may appear to be unimportant, but it is quite otherwise. The *hospitals* of this city and other large towns in Ireland, are numerous, and receive *large* public grants; and if Mr. O'Brien's intentions be, as I suppose they must, to obtain such information as will lead to the reformation of existing evils, surely it is not the best mode of proceeding, to omit inquiring into the constitution of such extensive medical charities as are the *hospitals* of Ireland. The *wording* of his notice excludes every *hospital* in Ireland, excepting "*fever hospitals*," inasmuch as that the other "medical charities" of Ireland are placed under the denominations of "infirmaries and dispensaries." This city contains several hospitals receiving parliamentary grants and other public money; and, according to Mr. O'Brien's notice, all these *notorious jobs* will escape inquiry, and consequent *reform*. I will not trespass further on your valuable time than to express my sincere conviction that you will direct your immediate attention to this matter, and cause the order for the returns to be amended by the addition of these words,—"and every hospital in Ireland which is supported wholly, or in part, by public funds," or words to that effect.

Trusting that you will pardon this liberty from a reformer, although a stranger, I have the honour to remain, Sir, your obedient servant,

JUSTICE.

Dublin, March 6, 1839.

Some of the Dublin hospitals which are not included under the returns called for by Mr. O'Brien; to omit a scrutinising quiry into each of them will be to encourage the most shameful abuses of public money:—

Lying-in Hospital; Steevens' Hospital; Mercer's Hospital; Incurable Hospital; Richmond Hospital; Meath Hospital; City of Dublin Hospital; Foundling Hospital; St. Vincent's Hospital.

CORONERS' INQUESTS.—Sir R. INGLIS, on the 9th inst, moved in the House of Commons for returns from the Coroners of England and Wales, of all inquisitions held by them during the years 1837 and 1838, in cases where death was found by verdict of jury to have been caused by poison.

THE LANCET.

London, Saturday, March 23, 1839.

The Westminster Medical Society has exhausted the subject of malaria; but the question of the influence of this subtle agent on the mind, and on the faculties of research generally, remains unsolved, although some of the assiduous debaters would lead us to believe that it is anything but favourable, if a deduction may be drawn from a limited number of observations in the locality of Westminster. It is greatly to be regretted that the London Medical Societies undertake so little, and that some of the many able men comprised in their ranks do not devise a plan which would enable the great body of the members to contribute substantially to the progress of science. If the great question of malaria, for instance, had been announced beforehand, the chemists in the Westminster Society might have prepared analyses of the air and soil of malarious districts; the pathologists might have ascertained the effects of decayed organic matter, and of gases, on the animal economy; other practical men might have drawn up abstracts of cases of malarious disease, have analysed its principal phenomena, fixed its centers, and proceeded to ascertain the influence of remedial agents on its course, duration, and termination. The whole series of separate investigations, when brought into juxta-position at the meetings, would have led to a better result, or at least furnished materials of less perishable stuff than many of the speeches. The physicians and pure surgeons who angle at the meetings of scientific societies, would do well to bait their hooks with something more substantial than after-dinner stories, crude theories, odd cases *apropos des bottes*,—"I saw a patient to-day," and "I have found this useful." There are working men in the societies; why do not they bring the result of their labours forward at the meetings? The superficial talkers, mere talkers, know, or ought to know, the emptiness of the common-place truisms to which they give utterance, and many of the speakers are capable of better things: why is not a higher scientific tone taken by the audience that would reduce the froward to silence, and drive them to serious observation and study, until they had discovered results worthy of attention? Without intending anything disrespectful, we must say that the public and the profession have a right to expect much more from the Medical Societies than their present meetings are likely to produce. We throw out these hints now: at the close of the session we shall probably take a general comparative view of their proceedings.

Questions of public health fall legitimately within the sphere of the Medical Societies; and the discussions reported, if ably conducted, would at once disabuse, and direct, public opinion. When, for instance, a destructive invention is advertised, and palmed upon the people by ignorant, avaricious, or reckless individuals,—when the Government authorities are imposed upon, and patents are granted on "infernal machines," the Medical Societies should denounce their dangerous nature. The discussion which Dr. Golding Bird has mooted relative to Joyce's stove, therefore, deserves commendation, although that gentleman may, perhaps, not be sufficiently versed in analytic chemistry to grapple with all the technical difficulties of the question: for it is evident that no superficial investigation can determine in what mode charcoal fumes destroy life.

In the observations which we felt it our duty to offer upon the destructive stove advertised by Messrs. Harper and Joyce, we drew a strong line of demarcation between the two inquiries: Are the fumes of charcoal fatal? and, Does the carbonic acid of the stove act as a poison, or destroy life by asphyxia, &c.? For the first question is answered by a thousand melancholy deaths in the affirmative. Experience has proved that concentrated charcoal fumes destroy

life as certainly as prussic acid, while the *modus operandi* appears to us still to be as inexplicable in one case as in the other.

Since we last directed attention to JOYCE'S destructive stove, several persons have been suffocated, or reduced to extremities. One case was reported in this Journal, where a whole congregation suffered, and was threatened with imminent suffocation. The church contained one of Dr. ARNOTT'S stoves, as well as the destructive stove of HARPER and JOYCE; the churchwardens, it is said, did not know which stove was in fault. If this be true, it is a proof of the ignorance of some churchwardens; for, from Dr. ARNOTT'S stove the products of combustion are discharged into the chimney, and carried off with greater certainty than the smoke of open fires; the destructive stove, on the other hand, is a chafing-dish, and nothing else, disguised; by which the products of combustion, namely, charcoal fumes, are distributed through the apartments in which the stove is placed. Dr ARNOTT'S stove is an invention, and cannot lead to loss of life: JOYCE'S stove is no invention, is always prejudicial to health, and inevitably leads to the destruction of life whenever the doors and windows happen to be closed. The fact is too well established, as we have already stated, that the vapour of charcoal is fatal; but as a patent has been granted under which Englishmen are ruthlessly put to death, and experiments are performed on human beings which M. MAGENDIE would hardly perform on dogs when he had a scientific object in view, it is our duty to make the results public. The following experiment has been recently performed under the patent. The details were given at an inquest, held before Mr. BAKER, at Wapping.

WILLIAM MALCOLM, a seaman, belonging to the *London*, a steam ship, went, on Monday night, into the captain's cabin, on deck, for the purpose of sleeping there, taking with him one of the stoves of the large abin. The witness SCOTT said:—

The stove was one of "Joyce's royal patent heating apparatus," a small one. The cabin where the deceased slept was eight feet eight inches long, six feet wide, and five feet high. The deceased was to turn out at two o'clock that morning to relieve him, but he did not do so; and at three o'clock witness called him, but receiving no answer he obtained the key from the captain and opened the door, when a very unpleasant smell was instantly perceivable. It was a disagreeable sulphurous smell, but there was no smoke whatever. The deceased was lying on his back in a state of stupor. His breathing was very loud, and the man appeared to be dying. He instantly removed the deceased, and sent for the doctor. Before he arrived Mr. Clineburgh, the steward, opened a vein, but very little blood came. The deceased expired in a very few minutes after he was taken out of the cabin. He had no doubt the deceased was killed by the noxious vapour and sulphur from the stove, which was heated with prepared charcoal. The cabin was closed, and there were no apertures by which the exhalations from the stove could escape.

Captain Ewen.—It is right that I should state that I sleep in this cabin when at sea. There are two apertures, one at the top and the other at the side. They were both closed last night, and the noxious gas from the stove killed the poor man.

The Coroner.—Those stoves have been found to be very faulty, I understand, in that respect. I had a complaint of one a few weeks ago. They are unhealthy, no doubt.

In answer to questions by the jury,

Scott stated that the deceased was quite sober when he turned in. He was a very strong, stout, and healthy man. When the door was opened there was heat in the stove.

Chalmers, a seaman, gave similar evidence.

Mr. Clineburgh, the steward of the *London*, said that Joyce's patent stoves were used in the saloon and bed-cabins, for the purpose of relieving the furniture and drapery of the moisture after sea voyages. He had apprised Mr. Harper, of King William-street, the proprietor of Joyce's patent, of the man's death, and a gentleman from his establishment was present.

Mr. James John Greer, who superintends Mr. Harper's business, said a great many of Joyce's patent stoves were in use.

The Coroner.—There cannot be a doubt that in a small room these stoves are dangerous, I suppose. Is it so?

Mr. Greer.—That is a question I must decline answering.

The Coroner.—There must be a little care.

Mr. Greer said, of course care was necessary in all things. The stove was adapted

for a room twelve feet long and twelve feet high (as our reporter understood the witness, amidst the conversation of several jurymen), containing 1700 cubic feet of air. When the stove was sold the purchaser was told it was necessary there should be a pipe or tube placed into a chimney, or through the wall or window, or other convenient outlet, if used in a sleeping cabin. A caution was always given to purchasers, and printed directions for use placed inside every stove. If the stove was placed in a small apartment, without any aperture, it was very wrong. The gas-lights in that room would kill every one in it if there was no vent, and all the apertures were stopped up. There were tubes adapted for Joyce's stoves, where the ventilation was bad. The stoves must not be used in bed-rooms without a tube attached. He never sent out a stove without a caution and printed directions for use.

Captain Ewen.—I never received any caution, and I never saw any printed directions.

Mr. Greer.—We never send them out without one. (The witness produced a copy, dated January 1, 1839).

Mr. Goodfellow (a juror).—I see the printed directions for use are dated January 1, 1839. I think this is since the man was suffocated by one of those stoves in St. Michael's Church, Cornhill. Was it not a stove of a similar description which killed a man in St. Michael's Church?

Mr. Greer.—I am not aware it was the same description of stove. I am not aware there was a man killed by a stove in St. Michael's Church.

The jury returned a verdict that "WILLIAM MALCOLM was suffocated by breathing "the *sulphur* and noxious vapour arising "from a stove in the cabin in which he was "sleeping." The verdict was substantially correct; but the interpolation of "sulphur" rests on no authority, and no evidence, as there was no proof that sulphur or sulphuretted hydrogen was found. These errors can only be obviated by the general appointment of coroners who have received a medical education.

A day or two after our last article appeared the patentees deemed it right, notwithstanding our reiterated cautions, to advertise the poison-breathing machine, with the venal certificates of Mr. BRANDE, and Mr. COOPER. Were these gentlemen aware at the time that they were paid for the certificates, of their falsehood, and of the loss of life to which they were calculated to lead? As chemists, they have both more fame than merit,—and very little of either, having never made a single discovery,—so that we would feign believe that their certificates were signed in ignorance, and that at the time they did not believe they should be accessories to the death of the unfortunate man in St. Michael's church, or of WILLIAM MALCOLM. But why do they not now retract their false certificates, as honest men, and as good citizens, who would not be instrumental in the deception and destruction of their countrymen?

It is greatly to be regretted that the body and brain of WILLIAM MALCOLM were not examined, for it would have thrown much light on the state of the brain in these cases. Cerebral congestion appears to be generally produced; and it will be recollected that the patentees endeavoured to lead the jury in St. Michael's Church to believe that the death of the old man was induced by apoplexy, and that the stove had nothing to do with the fatal result. The utility and necessity of determining at inquests the pathological states which attend death, were illustrated by another remarkable case, reported the week before last, in which a man who had taken prussic acid, was declared by a jury to have died of "visitation of GOD." It is evidently not enough to trust to the general evidence in cases of sudden death; the actual cause of the sudden death should invariably be sought for in the body. Unfortunately, the ratepayers are not yet sufficiently aware of this, and evince an unwillingness to go to the additional expense which it would involve. The obstacles, however, are not insurmountable, and little doubt can be entertained that, in a short time, the utility of *post-mortem* examinations in all cases of sudden death, will be rendered so evident as to lead to their general adoption.

It has been recommended that a medical man should be appointed in each district to conduct the post-mortem examinations, and the analyses, after the manner adopted in France. One, or two, or three persons, according to the extent of the district, if no-

minated by the Coroner, would, no doubt, acquire an expertness by constant practice which could not otherwise be realised. Of this we are fully aware. But in proposing any change, the effect of the present arrangement upon the great body of practitioners should not be forgotten. Should not the consciousness that they may be called upon at any time to conduct a post-mortem examination for judicial purposes, and be asked questions in anatomy, morbid anatomy, and toxicology, in the medical coroner's court and courts of justice, induce practitioners to keep up their knowledge upon these fundamental points? When they know that they may be called upon to distinguish a healthy, or a diseased, state of the membranes of the stomach, the effects of poison, will they not be induced to avail themselves of every opportunity which presents itself of examining that organ? And is it not importaat, considered merely as a matter of public health, that none of these means of maintaining the zeal and emula tion of medical practitioners should be abandoned? It is the same with the institution of the jury: its value must be considered not only in reference to criminal jurisprudence, but to the influence which it exercises on the jurymen, and on the great body of citizens who are called upon to serve.

Elements of Chemistry, including the Applications of the Science in the Arts. By THOMAS GRAHAM, F.R.S.L. and E., Professor of Chemistry in the London University College. Parts I. and II. Bailliere. 1837 and 1838.

ALTHOUGH these parts have been published for several months, we have delayed noticing the work of Professor Graham in expectation of the appearance of some of the succeeding numbers; but as we suppose that the laborious avocations of the author have prevented him from publishing with the regularity which his readers would desire, we cannot refrain from presenting some notice of the parts before us, more especially as they contain sufficient matter for a separate review.

Part I. consists of a concise exposition of the principal phenomena of heat and light, which bear directly upon chemistry. The subject is treated in a clear and distinct manner; and, although the author has no new doctrine to present, the phenomena of heat being a preliminary study to that of chemistry, and therefore without the pale of that science, still there are frequently exhibited original views or suggestions which evince the author's familiarity with the collateral sciences. In treating of heat he has followed the arrangement of Black and Thomson, which, after all the suggested improvements of other writers, is by far the simplest and most natural. When we apply heat to a solid we find that it increases in bulk; *expansion*, therefore, is the first obvious effect of heat. When we increase the temperature the solid becomes a *liquid*; *fluidity*, then, is the second effect of heat; and when we continue the application of the heat still longer the production of vapour is the consequence; *vaporisation* is, therefore, the third effect of heat. All these states depend, in common language, upon the combination with the particles of matter, of a certain additional dose of heat, which is not appreciable by the thermometer, and is, therefore, termed *latent*. Whatever may be the real nature of heat, whether it be a material substance, *sui generis*, or a property, or modification of some peculiar principle, this mode of expression is convenient for practical purposes, and has, therefore, been adopted by Professor Graham, in accordance with other distinguished writers on heat. But, in a strictly philosophical view, the question becomes altered, and we have to consider, not what is convenient, but what is true; and how is the truth to be discovered? By investigation. "Tamen nec modus est ullus investigandi veri nisi inveneris," says the Roman orator.

Nature of Heat and Light.— Heat and light possess such analogous properties that there is strong presumption in favour of the conclusion that heat is not a distinct substance, but a modification of the same cause which gives rise to the phenomena of light; but light would appear not to be a peculiar substance, because if matter is constantly passing from the sun, how is it that this luminary suffers no diminution, or that when two rays of light cross each other darkness results? It is the latter fact

which was so strikingly exhibited in the experiment of Dr. Thomas Young (in which he caused two waves crossing each other to produce darkness), that has tended to set aside the material theory of Newton, and to substitute that of Huygens. But another objection to the material theory of light is the fact, that from a small wire, by electrical excitation, as much light may be evolved, in a very short space of time, as would emanate from the sun in a year. Can light be a material substance pent up in this wire? Notwithstanding some forcible objections to the undulatory theory of light, more especially those pointed out by Sir David Brewster, which supposes optical phenomena to be produced by the undulations of an ether pervading all space, it is obvious, for several powerful reasons, that the material theory rests upon a less stable basis; and, from the analogy of the phenomena of heat and light, it can scarcely be disputed that the cause of both is closely allied.

Diffusion of Gases.—Nature of Respiration and Animal Heat.—We pass over the subjects of expansion and fluidity, as less interesting from the long-established laws of these particular states of matter, and come to vaporisation, under which head the author treats of the diffusive power of gases,—a subject for the elucidation of which the science of chemistry is indebted to Professor Graham; and, as it is upon this law that respiration depends, it becomes a matter of importance that physiologists should make themselves acquainted with it. It was observed by Döbereiner that if hydrogen was allowed to remain over water in a cracked jar, in the course of twenty-four hours the water in the jar had risen two inches above the level of that in the pneumatic trough. He ascribed this to the escape of hydrogen by capillary attraction, but Mr. Graham found that the residual hydrogen was not pure, but contained a quantity of common air. It was obvious, therefore, that some hydrogen had passed away, and that a small portion of common air had got access within the jar. Professor Graham made a set of accurate experiments to determine the ratio of the interchange, and he found that for every 3·83 measures of hydrogen which passed out of the jar, only one measure of common air entered. This disposition to interchange he terms *diffusion volume*. This tendency differs for each gas, and depends on its specific gravity. If the diffusion volume of air be 1, then that of gases lighter than air is greater than 1, and of those which are heavier less than 1; or, as a general expression, in every gas the diffusion volume is inversely proportional to the square root of its density. If, instead of a cracked jar, we use a bladder or a porous substance, such as gypsum, similar phenomena are exhibited. If a bladder, half filled with air, be admitted into a jar filled with carbonic acid, standing over water, the bladder, in the course of twenty-four hours, becomes much distended by the interchange of gases, a larger quantity of carbonic acid passing in than of air passing out. But besides diffusion there is volatilisation, because carbonic acid is readily dissolved by the water of the membrane, and this solution is evaporated into the space contained in the interior of the bladder. Now this is a phenomenon peculiarly interesting to the physiologist. Until lately it was considered that in the process of respiration the oxygen of the air combined with carbon in the blood, and gave origin to the carbonic acid of expiration, and that this union also originated the animal heat of the body. Calm inquiry, however, will at once produce the conviction that animal heat must derive its origin, not from one point of the body, but must be continually disengaged wherever the deposition of nutritive matter is going on, heat being always disengaged whenever matter changes from a rarer into a denser state. With reference to the production of the carbonic acid of expiration, it has been proved by an elaborate set of experiments (published in THE LANCET) by Professor Magnus, of Berlin, that there is quite sufficient carbonic acid existing in solution in the blood to account for the quantity of the gas given off by expiration. The process of respiration, therefore, so far as the breath is concerned, affords a beautiful example of the principle of gaseous diffusion through membranes. Experiments illustrative of this principle we recommend to the attention of medical men, because they afford an opportunity of studying the principle of respiration in some measure out of the body, and tend to demonstrate the close analogy of Nature's works in different relations. *Pseudo-physiologists* have been in the habit of attributing all the processes of the animal frame to some

principle of vitality, and instead of directing their attention to the effects of this obscure principle, they have speculated about its nature, and lost themselves in the wilds of conjecture. Magendie, in his most original lectures on the blood, has shown the fallacy of such a mode of procedure, and is fast establishing the important truth, that the motions of the fluids of the body are strictly those of fluids in other conditions of nature. The one-sidedness of the *pseudo-physiologists* proceeds from their ignorance of the accurate sciences, the true mode of investigation being to examine the effects, and thus ascend gradually to the cause; whereas they discover a cause, and explain effects in conformity with their assumption.

Chemical Nomenclature, Formulæ.—Part II. commences with an exposition of chemical nomenclature and notation. This is an important branch of an introduction to chemistry; for, however much it may be objected to, it is certain that nothing has tended to advance the science of chemistry more than the theoretical considerations implied by its nomenclature; and since the adoption of formulæ, which, when modified, exhibit either the simple or theoretical composition of substances, organic chemistry has progressed amazingly. Accurate experiments have frequently, and, by anticipation, will, no doubt, generally point out the propriety of employing the old names of chemical substances, as general expressions, while the provisional theoretical terms exhibit the progress which has been made in the investigation of the relation of the atoms to each other. To take an example: oil of vitriol of commerce, which was formerly considered to be an oil of sulphur, was, in the course of time, shown to contain sulphur and oxygen. It was thence called sulphuric acid. Subsequent experiment proved that it contained water. It was, therefore, not sulphuric acid merely, but sulphuric acid and water. More lately Professor Graham demonstrated that the water was essential to its composition, and that it ought strictly to be termed a sulphate of water, or $SH_3 + HO$. Oil of vitriol was, therefore, a better name than the improved one, sulphuric acid, although the latter was temporarily of use. But, further, oil of vitriol, when it combines with a base, may either exist in the new compound in the state of solid sulphuric acid, the water being displaced by the new base, or the elements of which it consists may change their position. Thus Glauber salt is usually considered to consist of sulphuric acid and soda, united together; its formula will then be, $NaO + SO_3$, and its name will be sulphate of soda. But there are a number of considerations which induce chemists to conclude that such is not a correct expression of the fact, and that the oxygen of the soda goes to the sulphuric acid, and forms a new substance, which Professor Graham proposes to term *sulphataxygen*; and that this new compound unites to the sodium; hence Glauber salt will, by this view, be a sulphatoxide of sodium, as expressed by the formula, $Na + SO_4$. The term Glauber salt, therefore, is what may be termed the *empirical* name, and the others, the *rational*. Chemists have applied these epithets to the various formulæ: SO_4Na, as the *empirical* formula for Glauber salt, being the mere statement of its constituents, while $SO_4 + Na$, or $SO_3 + NaO$, are the *rational* formulæ, because they exhibit the constitution of the salt.

Atomic Theory.—The author, without entering into the inquiry whether there is any probability in the suggestion that all atoms have a relation to each other, has adopted the atomic numbers of Berzelius. We do not intend to discuss this point any further than to observe, that if a relation exist between the bulk and weight of bodies, it follows, as a consequence, that there must be a relation between the weights of their atoms, and that the theory of Prout and Thomson, which asserts that all the atomic weights of other bodies are multiples by a whole number of that of hydrogen, must be correctly based. It would have been more preferable, we think, if the author had treated this important point with more attention than he has done. The numbers of Berzelius are those derived from experiments, without any correction whatever for errors of weighing and analysis. Now, no chemist can deny that 1 per cent. is within the limits of error. The numbers of Berzelius differ from those of Thomson, in many instances, nearly within this range, as is exhibited in the following table:—

ATOMIC WEIGHTS.

	Thomson.	Berselius.
Iodine	1575	1579
Hydrogen	12.5	12.4
Nitrogen	175.	177.
Carbon	75	76
Sulphur	200	201
Selenium	500	494
Tellurium	400	400.8
Arsenic	475	470
Antimony	800	806
Molybdenum	600	598
Vanadium	850	855
Barium	850	856
Strontium	550	547
Thorium	750	744
Manganese	350	346
Cadmium	700	696
Lead	1300	1294
Copper	400	396
Mercury	1250	1265
Gold	1250	1243
Iridium	1225	1233
Osmium	1250	1244

This table, comprising 22 bodies, the total number of simple bodies being 54, has been carried sufficiently far to show that in a great many instances the numbers obtained by correction, from theoretical considerations, and those from experiment, are almost identical. It is on this account that we have made the preceding observations, and we cannot leave the subject without recommending to the attention of students the remarkable evidence brought forward by Thomson in favour of his theory. No unprejudiced person can dispute that the theory is based in truth. The only question is, are we sufficiently advanced in our knowledge of the relations of the weight and bulk of matter to demonstrate it mathematically?

One of the most important parts of the work of Professor Graham is his discussion of the doctrines of chemistry, which we shall briefly notice.

Isomorphism.—It was remarked by Mitscherlich that the form of the phosphates and arseniates was identical, and that arsenic acid might be substituted for phosphoric acid, in any proportion, in the constitution of a salt, without altering its form. He extended this observation to a number of other substances, and established his doctrine of isomorphism, or of similiform bodies. He has thus enabled us to classify substances according to their relative form. Thus, with barytes, strontia, and protoxide of lead, the salts are isomorphous, or possess the same shape. Potassium, sodium, ammonium, and silver, correspond with each other in similar properties. Chlorine, iodine, bromine, and fluorine, have a close analogy to each other. Professor Graham has fully treated this subject, and with great clearness.

Dimorphism.—When sulphur is dissolved in a fluid termed bisulphuret of carbon, and allowed to crystallise spontaneously, it separates in the form of octahedrons, with rhombic bases; but if sulphur be melted in a pot, and cooled slowly, and after four or five hours, the liquid sulphur be poured off, large crystals of sulphur will be discovered lining the pot. These consist of oblique prisms, with rhombic bases. Now these two forms of crystallisation are quite incompatible with each other. We therefore say that sulphur is capable of assuming *two forms*, and hence the origin of the doctrine of dimorphism.

There are several other illustrations of the same kind, which are also, probably, attributable either to the possessioa by atoms of two dissimilar faces, which may enable them to revolve and arrange themselves in different forms, or to the union of different quantities of heat. It is obvious, however, that either of these views must be conjectural, as the state of our knowledge does not enable us to decide upon the preference of either explanation.

Isomerism.—Certain bodies contain the same proportions of constituents, but are quite different in their properties. Thus, the ether of wood spirit consists of $C_2H_2 + HO$, while alcohol is composed of $C_4H_4 + 2HO$, where the ingredients are the same, but exactly double. These bodies are said to be isomeric, as they present *equal parts*. Several other cases of isomerism are known, which are not easily explained, while others have been cleared up in the course of accurate experiments. The first examples which gave origin to the doctrine of isomerism, viz., phosphoric and pyrophosphoric acids, have disappeared before the experiments of our author, who showed that these substances differed materially in their affinities, in consequence of the application of heat. We may expect that the other cases may also speedily be explained, and that the term isomeric will come to signify nothing more than the presence of the same ratio of atoms in the compound.

Perhaps one of the most interesting portions of the work before us is that which treats of the constitution of salts, because we are indebted in a great measure for the light which has been thrown on this subject to the researches of the author. This discovery was that of the basic nature of water. Water he has shown to possess all the analogies of an oxide. He demonstrated that there were at least three phosphoric acids, differing solely in the number of atoms of water or oxide with which they combined, and hence the origin of *monobasic*, *bibasic*, and *tribasic* salts, in reference to the results of the combination of the mineral acids with the bases.

1. *Monobasic salts.*—The mineral acids are monobasic, and the same observation holds with regard to the greater proportion of acids. Sulphuric and nitric acids are monobasic. The water in these salts is only water of crystallisation. Thus, sulphate of lime is $CaOSO_3 + 2HO$. The water may be driven off by heat without decomposing the $CaOSO_3$.

2. *Bibasic salts.*—The bibasic acids are pyrophosphoric, tartaric, racemic, gallic, and perhaps lactic acids. The most familiar illustration of this order of salts is Rochelle salt, or, as it is more properly termed, potash-tartrate of soda.

3. *Tribasic salts.*—The tribasic acids are tribasic phosphoric acid, tannic, citric, cyanic, cyanuric, and fulminic acids. Thus, tannate of lead consists of three atoms of oxide of lead, and one atom of tannic acid.

Such is a brief outline of some of the theories which are contributing so rapidly to the advancement of chemistry. At another time we shall show their bearing upon organic chemistry,—the foundation of medicine—which teaches us the nature of the processes that are going on in the human body. It is theory, or classification according to analogy, that can alone raise medicine to the dignity of a science, for, in the words of Sydenham, when speaking of Hippocrates,—"Stetit magna illa Divini senis *θεωρια*, non ab irrito lascivientis phantasiæ conamine desumpta, ceu vana ægrorum insomnia, sed legitimam exhibens historiam earum naturæ operationum quas in hominum morbis edit."

In closing our remarks upon the work before us, we strenuously recommend it to the notice of medical men, as being one of the most philosophical books which could be placed in their hands.

The Physiology, or Mechanism of Blushing, &c., with a general view of the Sympathies, and the Organic Relations of those Structures with which they seem to be connected. By Thomas H. Burgess, M.D. Churchill. London, 1839. 8vo. pp. 202.

Not being able to give a very clear idea of the object of the author in composing the work which is now before us, we proceed at once to give a brief sketch of its subject-matter.

Dr. Burgess's work is divided into three sections; in the first he treats of the natural history of blushing; in the second of the anatomy of this phenomenon; and in the third of its mechanism. The whole is wound up by some miscellaneous observations on the moral and physical treatment of certain mental emotions, the advantages of gymnasia, and the pernicious effects of the mode of education pursued in boarding-schools, &c.

Dr. Burgess explains the anatomy of blushing in the following sentence:—

"From what does this remarkable susceptibility of the capillary system of the face to admit red blood proceed? I believe three essential causes give rise to it,—First, the way is already open, since the colour of the cheek proclaims its presence, its quantity only is increased, whilst, whenever another part of the skin is flushed, the blood it contains is nearly accidental. Secondly, the anatomical arrangement of the capillary system is better accommodated there than in other parts, to this influx of the blood; for it appears that there is a more ready communication between this system and the arteries of the corium. This is proved by injection, in which the face colours with the utmost facility. There is not an anatomist, I dare say, who has not occasionally been struck with this phenomenon in infants particularly, in which, if the coarse injections of our dissecting-rooms pass even imperfectly, the face becomes *quite black*, whilst very little fluid penetrates the other parts of the cutaneous system. Thirdly, it appears that there is a quicker sensibility in the face; in fact, the stimulant that attracts the blood to this part does not act with the same force elsewhere; for instance, a blow upon the ear will redden the cheeks more than a similar blow applied to the arms, &c.

"The blood is withdrawn from the capillary system of the face with the same ra-

pidity as it flows to it; in the space of a moment passions will alternately impress upon the features both the fiery complexion of a fever, the paleness of syncope, and also every intermediate shade. It is the facility with which this fluid penetrates those parts that colours the living picture, as it were, in which the divers passions alternately tinge the features with a thousand different shades, which fade away, return, change, and are modified, according to the state of the mind."

The mechanism of blushing depends upon the peculiar arrangement of the capillary vessels in the cheek, and on the nervous connection which is produced by anastomosis between the cerebral, sympathetic, and pneumogastric nerves. Respecting the physiology of blushing Dr. Burgess advances the following theory :—

"The exciting impression is first received by the sensorium, which physiologists now admit to be situated in the brain, the *mind* reflects upon the nature of the exciting *cause*—a train of ideas is generated and passed in review before the reflecting faculties (the *mind's eye*). The *conscience* becomes roused, and the impression first conveyed to the sensorium is now submitted to it for final judgment; it is here weighed in the balance (I am speaking of the true blush—the blush of shame). If the mind be susceptible, and if the memory recals and brings before the sensorium the recollection of past circumstances inimical to the moral feelings, and perceives in them an identity with the present; or if the *conscience* itself sees in the exciting impression conveyed to the sensorium at first, a just evidence of an infringement upon the laws of morality, it *repels* the impression, and promulgates to the different *vital* organs in the system its own feelings. Thus the chain of action is set up which is finally to bring forth the blush on the cheek.

"But if the first impression be feeble, so as only to excite a partial emotion in the mental faculties (as takes place in those instances of *suppressed* blushing, where the individual experiences all the *preliminary sensations*, but still the impulse is not sufficient to produce the phenomenon), the cheek will not become suffused. When the appeal to the *conscience* preponderates (the infringement on the moral and social laws being weighed in the balance) the individual concerned is perfectly aware, even some moments beforehand, of what is about to take place—*relition* is now forcibly called into action, and strenuously endeavours to avert the threatened and painful *exposé* of the CONSCIENCE and its feelings. It is in vain that the *will* struggles against the combined power of the mental faculties; nay, the very attempt to suppress the exciting impulse only adds new vigour to its involuntary movement, by retaining the impression still before the sensorium and conscience, which the latter indignantly endeavour to disclose, and finally succeed in transmitting their own impression to the different organs that sympathise with them during the production of the phenomenon; it is the diffusion or propagation of this sympathetic influence that I now come to investigate."

The above extracts will enable the reader to form some idea of Dr. Burgess's style of writing, and of the manner in which he has treated a really difficult subject. Some of the chapters are necessarily devoted to popular rather than to medical views, but there are others, particularly those on "the anastomosing of the nerves," and "the theory of the mechanism of blushing," which indicate that the author is capable of entertaining both original and ingenious opinions on some of the most difficult points of human physiology.

ROYAL MEDICO-CHIRURGICAL SOCIETY.

Tuesday, March 12th, 1839.

Sir B. C. BRODIE, Bart., President.

OBSERVATIONS ON THE NATURE AND TREATMENT OF NÆVUS.

By FREDERICK TYRRELL, *Surgeon to St. Thomas's Hospital, and to the London Ophthalmic Hospital.*

THE author begins by observing, as the result of much experience in the treatment of this disease in the last few years, that, of the many plans of treatment which have been suggested by their inventors, none are exclusively applicable to every form of the disease. His object, therefore, in his present communication, is rather to point out the description of case to which each method is adapted, and to indicate the rationale of its action, than to offer any new plan of his own. With this view he considers—1st. The nature of the disease. 2nd. Its varieties, pointing out the seat, the position, the progress and consequence of each form, if allowed to run its course. 3rd. The different modes of treatment in present use; and, 4th., the proper application of these means. When the disease is purely cutaneous, not extending at all to the subjacent cellular texture, he recommends the forming a belt around its margin on the sound skin, by means of concentrated nitric acid, and afterwards imbuing the surface of the growth with the same liquid: at once, if small; but if of great extent, by repeated applications

made to a small portion at a time. The author holds, however, that the use of escharotic applications should be confined to those cases which are purely cutaneous, since in those which extend more deeply, the agency of the acid stops short of the deeper-seated parts of the tumour, and, consequently, when the superficial part separates by the ulcerative process, hæmorrhage may be expected to ensue. For the destruction of the subcutaneous form, as well as that of a mixed character, he recommends the injection into their substance of stimulating fluids; but he points out a very important preliminary step which, in his opinion, will prevent those accidents that have sometimes attended the too wide diffusion of the injected fluid; viz., suppuration and unsightly puckering of the skin after the cure. This plan consists in cautiously injecting a small portion of a saturated solution of alum into the surrounding cellular tissue, before anything is done to the nævus itself, with the view of producing its consolidation, and thus preventing the extension of the disease by the excitement to be afterwards induced in the tumour by the injection of the stimulating liquid into its own substance, as well as the undue diffusion of the fluid. Cases are detailed of the successful employment of this practice. The author speaks highly of the ligature, as a means of relieving a great variety of forms of nævus, but expresses his fear that setons passed through the substance of the tumours may be productive of hæmorrhage which, in young and delicate subjects, would be dangerous.

Sir B. BRODIE had treated small subcutaneous nævi, in situations where it was advisable to avoid the scars which would follow the use of the ligature or the knife, in the following way:—He melted some nitrate of silver in a platinum spoon and dipped into it the blunt points of two or three probes, which being withdrawn in the space of few seconds, were found to be coated with the caustic; he then made one, two, or three punctures, according to circumstances, in the nævus, by means of a small instrument resembling a lancet, and into these punctures he inserted the armed probes, and allowed them to remain for a minute or two, until the nitrate became decomposed by acting on the structure of the nævus; he had a little oil in readiness in order to counteract the too violent effect of the caustic. In this way inflammation was set up, and the tumour became consolidated. In general one operation was sufficient to effect a cure, in other instances, the proceeding required to be repeated twice, or more frequently, the pain attending which was very slight. In the case of a child who had a large nævus extending over the greater part of the face, and in which a variety of means had been resorted to, the application of nitric acid among the rest, he had pursued the above plan in a part of the tumour; in the other portion he had broken up the net-work of vessels, by adopting the proceeding recommended by Dr. M. Hall. A perfect cure ensued, although an ugly scar remained on the part to which the nitric acid had been applied. He had also treated successfully, by this mode, a case of an ugly subcutaneous cellular nævus situated at the extremity of the nose. He punctured it in several parts, and then introduced the probes. Some slight puckering of the skin where the caustic had been inserted were the only marks which remained. Whilst speaking on this subject, he might also allude to another kind of marks very commonly found upon the face, and consisting of little stellated patches of blood-vessels. Generally speaking these went away when left alone, but persons in high life frequently complained of them as blemishes, and requested means to be adopted for their removal. When looking at these spots through a glass it was easy to discover one or two larger vessels entering into and supplying the net-work, which spread out like the web of a spider. Having found the supplying vessel or vessels, he placed on them the end of a small probe, and if he found that the red spot entirely disappeared, he proceeded thus: he divided the vessel by a minute puncture, and then destroyed it by inserting a piece of caustic potash scraped to a very fine point; he then introduced a small quantity of vinegar, in order to prevent the caustic extending its influence beyond a certain limit.

Mr. CÆSAR HAWKINS, in allusion to the use of steel needles as recommended by the author of the paper, in the treatment of nævi by ligature, suggested that the old silver needles would not require the nipping off of their ends, and would not, therefore, be so likely to produce irritation. Nævi generally consisted of a mixture of arteries and veins; occasionally, however, they were entirely venous. He had seen a congenital case of this kind, in which the disease occupied the back of the head and neck, and extended down as low as the scapulæ,—the tumour consisted of branches given off from the post-aural, occipital, and lingual veins. There was no discolouration of the capillaries, and no pulsation. The child was now seven years of age, and the tumour increasing.

Mr. T. B. CURLING rose to notice one of the objections which the author of the paper had advanced against the treatment of nævi by setons, and which consisted in the fear he entertained of the occurrence of dangerous hæmorrhage. Now he (Mr. C.) had used the seton in a great number of cases of nævi, no hæmorrhage, except such as was readily stopped, taking place; he thought, indeed, the great advantage of the treatment by setons consisted in its freedom from the occurrence of hæmorrhage. The treatment

by ligature was objectionable; for, even though it might cure, it left an ugly scar, and was not free from danger. In a case in which the crossed ligatures were applied the child perished in a few days, from the occurrence of great constitutional irritation. The mode of treatment by injection, he believed, was originally proposed by Mr. Lloyd. There was one source of danger from this proceeding, for as it was necessary that very strong caustic should be employed, there was fear of its making such an impression on the larger vessels as to be attended with danger. In a case treated on this plan the patient died almost instantly, probably from the above cause. In what way did Mr. Tyrrell guard against the occurrence of such an accident? Mr. Lloyd, for this purpose, had recommended the use of a piece of pasteboard with a piece the size of the disease removed from it.

Mr. Tyrrell considered that the explanation given in the paper, of the precautions he took for preventing the occurrence alluded to by Mr. Curling, was sufficient. He (Mr. T.) had there stated that he invariably consolidated the surrounding cellular tissue before he interfered with the tumour itself. In two cases in which he had employed the injection the disease was much reduced in size before he touched it, proving the influence of the consolidation around. He thought this plan quite as successful as the one recommended by Mr. Lloyd. He (Mr. T.) did not bring forward his plans as perfect, but merely as the result of his own experience. He regretted that in the reading of the paper the Secretary had left out the most important case, which had been treated by the application of nitric acid. In this instance the nævus was cutaneous, occupying part of the superior eyelid, the whole of the left cheek, half of the upper lip, and extended up to the septum nasi. Tartar emetic had been employed, and part of the disease had been destroyed by it, but it was extending in other directions. He circumscribed the boundary line in this case, the nævus being very large, at two distinct periods. This proceeding was followed by no extension of the disease. He then painted over the surface, piecemeal, with a brush dipped in the acid, and touched the neighbouring portion to the last, at each successive application. In this way hæmorrhage was avoided, and, after five or six applications, the disease was removed, there being only, here and there, a slight contraction of the skin, consequent upon the use of the tartar emetic.

The discussion having terminated, the President rose to adjourn the Society, and took that opportunity of addressing a few words to the members on the occasion of their having elected him their President. He had not of late years been a frequent visitor to the Society, yet he had always been alive to its interests, and he felt proud to have his name associated with those who composed it. The success of that Society had been unprecedented; the great majority of such institutions only flourished for a few years, and so long as those who first formed them took an active part in their proceedings; he believed that even the celebrated Royal Academy of Surgery of Paris, had only published their Transactions during a period of forty years. The Medical and Chirurgical Society had already, however, existed for thirty-five years, and was still in all the vigour of youth, and promising more usefulness to the profession and the public than ever.

Sir Benjamin then referred to the foundation of the Society by Drs. Marcet and Yelloly, the latter of whom he was happy to see present. All must sympathise in the feeling of satisfaction and pride which that gentleman must experience when he surveyed the goodly superstructure which had been raised on the excellent foundation he had laid. Sir Benjamin then expressed his readiness and desire to forward the interests of the Society.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 16th, 1839.

Dr. Chowne, President.

ACTION OF CARBONIC ACID.

Dr. Golding Bird addressed the Society on the mode in which carbonic acid gas produces death, when it acts as a poison. He (Dr. B.) had altogether discarded theory, and trusted entirely to the collection of facts. Unfortunately the report which has reached us of Dr. Bird's paper is exactly the reverse of this, the original facts being extremely few and the statements of opinions numerous. We shall, therefore, defer our notice of it for the present.

MEDICAL SOCIETY OF LONDON.

DEATH FROM EPISTAXIS.—ABSENCE OF BLOOD IN THE BRAIN.

At the last meeting of this Society Mr. Crisp detailed the following case which had occurred in the practice of a friend:—Mrs. ——, aged about 40, had been married five years, and about three years since was brought to bed of a seven months child, which did not survive. For many years, but particularly since her marriage, she had been in a delicate state of health; she was subject to palpitation of the heart, complained frequently of languor and debility, and on one occasion her legs and feet were œdematous. Small quantities of blood had

passed occasionally from the lungs and bowels. During the last three years she was twice salivated, once by taking only three grains of calomel, and on another occasion merely by rubbing in the iodide of potassium ointment. The medical attendant was called to see her on Thursday, and found her in a state of great exhaustion, arising from hæmorrhage from the right nostril. This had commenced on the previous evening; she had lost an enormous quantity of blood,—the nurse said four quarts. The nostrils were plugged; cold applications were made to the forehead, &c., but she died on the same evening, her death being preceded by violent convulsions.

Examination of the Body twenty hours after Death.

The external appearance of the body rather muscular; the skin blanched.

Head.—The brain was perfectly healthy; the vessels and sinuses nearly exsanguineous; a few very small cylindrical coagula were found in the longitudinal sinus, and one in the lateral. The plexus choroides was white and bloodless; the blood in the brain was estimated as not to exceed a drachm in weight. About an ounce and a half of serum escaped, during dissection, into the calvarium.

Thorax.—The lungs were healthy, but bloodless. The pericardium contained about an ounce of serum. The heart was very large; the right auricle was distended with dark coagulated blood, extending into the vena cava (about three ounces); the cavity of the left ventricle was diminished in size, and its parietes three times their natural thickness; the semilunar aortic valves rather thickened, but no bony or ætheromatous deposit upon them. A small quantity of the latter deposit was seen on the bicuspid valve. The lining membrane of the aorta was softened and peeled off on being rubbed with the nail. All the abdominal viscera presented a normal appearance, with the exception of the left kidney, which had several small hydatids on its convex surface; and the fundus of the uterus, upon which were situated two white tumours, one as large as a nut, the other the size of a pea. On cutting into them they presented a white gristly appearance. On removing the right nasal and superior maxillary bones, the body of the sphenoid, and the orbitar plates of the frontal, the mucous membrane of the nose and sinuses was examined with great care, but no vessel could be discovered from which the blood had passed. The membrane over the inner portion of the turbinated bone was in a state of slight ecchymosis, and a small clot of blood was in contact with it.

Some conversation followed on the connection which existed between hypertrophy of the heart and hæmorrhage.

BRITISH MEDICAL ASSOCIATION.

SPECIAL MEETING OF COUNCIL.

The minutes of the last meeting having been read and confirmed,

J. Edmunds, Esq., Kineton, Warwickshire, was admitted a member of the Association.

A letter was read from Dr. George Taylor, of Kingston-upon-Thames, relative to the evidence on the medical department of the Poor-Law; and letters were read from Mr. Ceeley, of Aylesbury; from Mr. Edmunds, of Kineton, Warwickshire; from Mr. Smith, of Sudbury, Suffolk; and from Mr. Ralph, of Saling, Essex on the same subject.

A letter was read from Mr. Heyward, of Egham, entering more into detail, and answering all the queries contained in the printed document as issued from the Poor-Law Commissioners to the Assistant-Commissioners.

The report of the Sub-Committee appointed at the last meeting to draw up "some plan for better medical attendance on the poor, &c., to be laid before the Council at their next meeting," was then read, and gave rise to considerable discussion, which did not terminate until a late hour, when it was resolved unanimously,—

"That the Secretary write to the Poor-Law Commissioners, to request the favour of the same deputation which waited upon them before having another interview with them."

The notices of motion being disposed of, the meeting then adjourned.

UNIVERSITY COLLEGE HOSPITAL.

SCALD OF THE GLOTTIS.—TRACHEOTOMY.—DEATH.

W. R., aged two and a half years, was admitted a little after six o'clock in the evening of February 13th, under the care of Mr. Cooper, on account of the difficulty of respiration following a scald of the glottis, which was produced by the child attempting to drink, in the absence of the mother, from the spout of a tea-kettle, in which there was boiling water. The child was taken to a medical man in the neighbourhood, who ordered repeated doses of castor oil to be administered. The mother states that the difficulty of breathing came on gradually from the time of the receipt of the injury, being accompanied with profuse secretion of saliva, and has continued to increase up to the present time. On admission, the child was labouring under intense difficulty of breathing, attended with a loud noise, especially during inspiration, as in croup. The child was pale and rather cold; the pulse 120; there was an impossibility of swallowing fluids. The child was placed in bed,

three grains of calomel were administered immediately, and ordered to be repeated every half-hour. Towards eight o'clock the dyspnœa appeared to become somewhat exasperated, and, in consequence, the operation of tracheotomy was immediately performed by the house-surgeon, Mr. Carter. The trachea was exposed without the loss of any blood; a curved silver tube was then introduced into it, and fixed by a tape passed through the rings of the canula, and tied behind the neck. Some caution was necessary on the opening of the trachea, in consequence of the shortness of the neck and the depth at which it lay, besides the state of continual motion in which the trachea was kept by the convulsive efforts of the child to breathe. In a short time after the operation the child fell into a sound and tranquil sleep, which was continued during the greater part of the night.

February 14. The child is doing very well, is playful, and its respiration is quite free; a piece of flannel is kept over the orifice of the canula to prevent the ingress of floating particles of dust, and also to heighten the temperature of the air which is inspired. Continue the calomel. In the course of the day the dyspnœa appeared to return; the pulse was frequent and more full; the skin hot. Six leeches were applied to the neck, and produced a marked relief of the symptoms; the child is now able to swallow, and has taken some milk and water with ease.

15. Towards the middle of the night the respiration again became hurried, accompanied by some bronchial râles in different parts of the chest; these symptoms continued to increase until eleven o'clock in the morning, when the child expired.

Examination of the Body twenty-four hours after Death.

The mucous membrane covering the epiglottis and aryteno-epiglottidæn ligaments was found much swollen from the infiltration of the submucous cellular tissue, and some scattered and slight depositions of pus at various points. The surface of this part of the mucous membrane presented an irregular, rough, and tuberculated appearance. The cavity of the ventricles of the larynx, and the chordæ vocales, did not appear to have been reached by the scalding fluid, for they presented an almost natural appearance; only that part of the bag of the pharynx which corresponds with the posterior fauces presented signs of inflammatory action, the mucous membrane being more vascular and turgid here than is usual. A quantity of muco-purulent secretion filled the lower part of the trachea and bronchi, but this did not extend to the minute subdivisions of these tubes, which were also free from the vascular injection present in the larger ones. The opening in the trachea which was made when the operation of tracheotomy was performed, was in the third and fourth rings of the trachea, below the cricoid cartilage.

HYDRO-HÆMATOCELE.—OPERATION.—CURE.

J. C., aged 55, an Irish labourer, was admitted under Mr. Cooper on the 18th of December, 1838; he has had a large swelling in the left scrotum during the last three or four years, which he calls "a rupture," but it ought rather to be considered as being a hydrocele. The day before his admission he received a heavy blow upon this side of the scrotum with a sledge-hammer. Soon afterwards the swelling of the scrotum had very much increased, accompanied with excessive pain along the course of the left inguinal region into the loins. The next day the integuments of the scrotum and penis were much distended and discoloured by the copious effusion of blood into the cellular tissue underneath. To have an opening draught, and to be placed on middle diet; an evaporating lotion to the injured part.

29. The discolouration and ecchymosis of the penis and scrotum have almost disappeared; the tumour in front of the left testis still remains, but is opaque when examined with a candle in a darkened room; is labouring under an attack of acute rheumatism, which gave way, after a few days, to the use of colchicum wine.

Jan. 17. A trocar was introduced into the tumour, and a quantity of thin serous fluid, coloured with blood, evacuated.

26. As the size of the tumour was not much diminished, a free incision was made into it, and about four ounces of thick, dark, congula of blood were removed. A dossil of lint was placed in the wound.

Feb. 1. He has much constitutional derangement, accompanied with diffuse inflammation of the cellular tissue of the scrotum. He took five grains of calomel, with ten of colocynth, followed by an ounce of castor oil. The fœtid pus to be washed out of the cavity of the tunica vaginalis by means of a syringe and warm water.

18. Nearly well.

Since last report has been going on well, and is now able to leave the hospital.

INJURY TO THE URETHRA FROM A FALL.

T. B., aged 11, was admitted Nov. 2nd, 1838, under the care of Mr. Liston. He states that about half an hour previous to his admission, he was climbing over some palings, when one of his feet was pulled from the place on which it rested, by another boy, by which means he fell across the top of them, upon the perineum, and received an injury of that region. Upon his admission blood was dripping from the urethra; there was also considerable ecchymosis of the cellular tissue of the perineum, and extending for some distance along the scrotum. No urine had been

voided since the receipt of the injury. A catheter was immediately passed into the bladder, and there retained.

Nov. 3. The ecchymosis has extended farther upon the scrotum; the urine passes through the catheter, which is still retained.

4. The catheter came out this morning, and the boy passed his water along the natural passage without experiencing any pain. The instrument was reintroduced.

10. Since the last report the catheter has been several times changed, but to-day it was removed altogether. The urine is passed in a full stream without pain. The swelling in the perineum is much softer.

14. Mr. Liston opened a small abscess which had formed at the base of the penis, from which a small portion of urine escaped.

20. The swelling in the perineum is almost gone. A small quantity of urine passes through the opening at the base of the penis when the boy makes water.

22. There is now no hardness to be felt in the perineum; the opening at the base of the penis has been closed by a scab having been formed over it. On pressure a small quantity of pus escapes by the orifice of the urethra.

26. No urine has escaped by the fistula for several days.

29. Discharged cured.

ST. GEORGE'S HOSPITAL.

PARALYSIS FROM LEAD.

THOMAS EARLES, a painter by trade, was admitted under the care of Dr. Seymour.

It appears that he has been frequently subject, during the last six years, to repeated and severe attacks of colicky pains in the bowels. The last attack, which occurred about a month ago, lasted five days. About three months since he lost the power of the middle and ring-fingers of the right hand; and after the last attack of colic the index and little fingers of the same hand became similarly affected; the thumb, however, still remains free from paralysis. The tongue is white, the bowels open, the pulse quick, and the surface of the body cold. The countenance is anxious, and he is generally much emaciated. He was ordered to have a tepid bath every night, and a senna draught early every other morning.

Peruvian balsam, 1 drachm;
Acacia mixture, 2 drachms;
Almond emulsion, 10 drachms. To be taken three times daily.

Nov. 13. A blister to be placed on the back of the hand.

17. Hand placed on a splint. Medicines continued.

21. The two fingers last affected—the index and the little fingers—have recovered considerable power, the others remain the same.

Dec. 2. In much the same state as at last report.

Strychnine, 1 grain;
Extract of liquorice, 30 grains. To be divided into twelve pills, one to be taken three times daily.

3. There is some swelling of the hand and fingers with involuntary muscular twitchings.

7. Much the same; ordered to take two pills three times daily.

8. The increased dose of the strychnine has produced increased muscular twitchings of the affected hand and fingers, which are very painful in consequence. Four pills to be taken daily.

9. The involuntary twitchings are much increased in frequency, and he thinks that he has more use of his hand in consequence. Two pills only to be taken every day.

11. He was seized yesterday with an attack of gout in the left leg; the paralysis of the hand and fingers is much diminished. To leave off the strychnine pills, and to have,—

Colchicum wine, half a drachm;
Antimonial wine, half a drachm;
Camphor mixture, 10 drachms. Three times daily.
A *senna draught*, containing half a drachm of *colchicum wine*, to be taken early to-morrow morning.

12. Pulse very quick; skin hot; bowels reported open; the ball of the great toe, the instep, and the ankle-joint greatly inflamed. The colchicum draught to be taken every four hours. Five grains of calomel to be taken at bed-time, and the following draught early to-morrow morning,—

Infusion of senna, 2 ounces;
Colchicum wine, half a drachm;
Burnt magnesia, 10 grains;
Comp. tinct. of cardamoms, 1 drachm;
Tincture of senna, 1 drachm.

13. The gouty pain in the foot diminished; no sickness caused by the colchicum.

18. The gout remains stationary; the paralysis is relieved; no sickness or diarrhœa; the dose of colchicum was increased to one scruple.

29. Had a vapour bath yesterday which induced some return of gout, and which has been countermanded, and the colchicum draught to be continued.

Jan. 1. The gouty pain is entirely gone, but the left ankle is so weak that he cannot bear his own weight upon it; he perspires much at night; the hand remains much the same.

9. Gout absent; an ammoniated liniment was ordered to be rubbed on the affected arm.

11. The palsy very much relieved; convalescent. All medicines to be left off and a little spirituous liquor allowed.

20. Some slight return of gout in the

right ankle; bowels open; palsy better. A colchicum draught to be taken twice daily.

Acetous extract of colchicum, 3 grains;
Compound ipecacuanha powder, 5 grains.

To be taken every night at bed-time.

From this date he went on gradually losing the gouty affection, but the paralysis still remaining, though in a diminished degree. He was discharged from the hospital, Feb. 7, relieved only.

PARTIAL PARALYSIS.

Rebecca Birch, a married needle woman, aged 29.—Her pulse is 96, and extremely weak; the skin cold; the tongue furred in the centre and red at the edges; the bowels confined; the urine copious; the catamenial secretion regular.

About nine months since she had a very severe pain in the right side of the head, which was followed by double vision; previous to this attack the catamenia had been very irregular. Paralysis gradually came on after the supervention of headach, and about a week since (until which period the paralysis had much increased) she had a fit of an hour's duration. From that time the articulation has been more or less imperfect, and the right arm has been paralysed as well as the left, which has been affected ever since the first seizure. During the fit her senses left her entirely. She has since had less throbbing pain in the head than before. A blister was ordered to be applied behind each ear; six grains of *calomel* to be taken directly, and a *senna draught* every four hours afterwards, until the bowels are freely opened; a *saline enema* to be administered early to-morrow morning; milk diet.

Dec. 29. The bowels have been well opened, and the blisters have healed up; hands cold. Five grains of *blue pill* to be taken at bedtime, and a *senna draught* early to-morrow morning.

Jan. 1. The tongue is much furred and the bowels open. The pill and draught to be repeated. She requested leave at the physician's visit to go out for two or three hours, which was granted, and she never made her appearance again.

PREPARATIONS OF GOLD IN SCROFULA.

The preparations of gold have been recently employed by M. Baudelocque, at the Hospital of Sick Children, and by M. Velpeau, at La Charité, in cases of scrofula. At the former of these two hospitals the preparations of gold have been administered in enormous doses. M. Baudelocque has given the hydrochlorate and stannate of gold, in doses of from ten to twelve grains, without producing any effect on the disease; and what is still more remarkable, without any apparent injury to the constitution of the children submitted to experiment. The oxide of gold, prepared by potash, was administered in as high as twenty grains during the day. At La Charité M. Velpeau has given 15, 18, and 20 grains of the hydrochlorate and oxide of gold during the day. Higher doses were not tried, merely on account of the great expense of the medicine. The above results are curious, because the preparations of gold have hitherto been regarded as extremely poisonous. M. Orfila says that the hydrochlorate of gold is infinitely more active than the corrosive sublimate, and M. Devergie mentions that at the dose of one-tenth to one-twentieth of a grain it produces more or less inflammation of the gastro-intestinal mucous membrane.—*L'Experience*, No. 87.

DESSAULT'S TREATMENT OF HOSPITAL ERYSIPELAS.

As soon as ever Dessault perceived any trace of the development of erysipelas after wounds, operations, &c., he immediately administered to the patient one grain of tartar emetic in a large quantity of water. The unfavourable symptoms immediately diminished after the administration of the draught, and sometimes disappeared altogether, even when the only effect of the medicine was to increase the urine, and augment the cutaneous transpiration; were the symptoms more obstinate, he then gave the draught two or three times, or oftener; as the fever disappeared, and nothing remained but some unpleasant bitter taste in the mouth, he completed the cure with one or two purgatives. Dessault assures us that he never met with a case of hospital erysipelas (and there were many of them at the Hôtel Dieu in his time) which resisted this method of treatment. He remarked that the disease was always most obstinate and severe in persons who had been bled several times.—*Gaz. Med.*, No. 10, 1839.

MEDICAL OFFICERS IN THE NAVY.

"The next class, Sir, is the surgeons and surgeons'-assistants. In my early days, surgeons in the Navy were a very inferior class; and a number of lives were sacrificed in the service, in consequence of their want of professional knowledge. In order to obtain a superior description of men for this department, Government professed to give great additional emoluments. Now, I beg to call the attention of the House to the present condition of this important class of officers, as compared with surgeons in the Army. An assistant-surgeon in the Army, has more half-pay, after 25 years' servitude, than a

surgeon in the Navy will receive for a period of 29 years and eleven months. Since the year 1815, 100 medical officers in the Army have been promoted to ranks higher than regular surgeons; and have thus become entitled to higher half-pay; while, during the same long period, only one surgeon in the Navy has been advanced to any higher rank that confers an increase of half-pay. When an assistant-surgeon in the Army is promoted, all his time is reckoned; whilst, upon a similar occasion, only 3 years are reckoned for an assistant-surgeon in the Navy, however long he may have served, and although in the Army an assistant-surgeon will have 7 shillings a-day, after 25 years' service, an assistant-surgeon in the Navy will have only 3 shillings, even though he may have served 50 years. In drawing these comparisons, I beg hon. gentlemen will understand that I refer to official documents.

"Now, Sir, I will add an instance of the comparative treatment of this branch of the Naval service, in reference to the civil department. In the Report of the Light-House Committee, a recommendation was adopted, to the effect, that the collectors of customs should receive the light-dues, instead of Government having to pay, in some instances, a very heavy poundage for that service. An objection was made that, in such a case, the collectors must receive an *additional* salary; as they could not be expected to undertake so much *additional* trouble, and incur the responsibility that must accompany it, without some further remuneration. Now, Sir, when the Royal Naval Asylum was built, at Greenwich Hospital, the duty which had been performed by surgeons and assistant-surgeons was ordered to be done by the medical men of the hospital. These officers were thus burdened with the care of attending *one thousand children*, besides all the masters and other persons, *without receiving one shilling remuneration in addition to their pay.*"—*Sir Ed. Codrington in the House of Commons, on the grievances of naval officers.*

We are tempted to extract from the same speech the following characteristic anecdote of the same gallant and persevering friend of naval surgeons:—

"An hon. Member below me, has hinted to me, that we receive honorary distinctions, in addition to our pay. Yes, Sir; I, amongst others, have been fortunate enough to receive some honorary distinctions, and I hope I set a proper value upon them; because they were given as an acknowledgement of my services, and without being asked for. It is true, Sir, that a bill was brought to me for 386*l.*, as fees for receiving one of those distinctions, the Grand Cross of the Bath. It was observed, that it would be very hard on me to have such a bill to pay. I answered, 'Not in the least,' for I would not pay a single farthing of it; and I never did. Honorary distinctions should never be conferred, excepting for important services, and without being asked for: and, moreover, without ever being paid for; for, if they were to be purchased, they are not worth having."

EXPOSURE UNDER INOCULATION.—In the case of the *King* v. *Bennett*, reported in Maule and Selwyn, the defendent, an apothecary was indicted for having inoculated for the small-pox, several infants, and, while they were dangerously ill of the said disease, unlawfully and injuriously causing them to be carried into the public streets and highways. The defendant was found *guilty*. Mr. Justice Le Blanc, in passing sentence observed, that the introduction of vaccination did not render the practice of inoculation for the small-pox unlawful, but that in all times it was an indictable offence to expose persons infected with contagious disorders in a public place of resort. The defendant was sentenced to *six months'* imprisonment. [We trust that this example will be followed in analogous cases. It is the duty of every humane and well-intentioned individual to give such information as may lead to the punishment of those who wilfully propagate small-pox.—ED. L.]

TO CORRESPONDENTS.

THE treatment received by *A Student of University College Hospital*, during Mr. Wormald's lecture, was illiberal in the extreme. We had hoped that the manners of the hospital monopolists had been slightly improved of late, but we were, it seems, mistaken.

Before inserting the paper of *Mr. Squire*, on the *meconate* of morphia, we should like to know whether the preparation be a secret one or not.

The plaster of *Mr. Turratt* may or may not be a good application, but we never give insertion in this Journal to anything connected with secret remedies.

The letter relative to a recent occurrence in the ..... Union has been received. Having sanctioned "the disgraceful system of tendering for medical officers," by himself tendering, should Mr. P. be surprised that the poor of Greenwich have been knocked down to the lowest bidder?

K. I. The operation of the Apothecaries' Act extends to all England and Wales.

Received the communications of *Mr. Howitt*, *Mr. Reilly*, *Dr. Keith Imray*, *Mr. Clark*, *Mr. Verity*, *Mr. Sherriff's*, *Dr. Dickinson*, *An Old Practitioner*, *A Subscriber*, *Chirurgicus*, &c.